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FINAL,AMENDMENT & ENVIRONMENTAL ASSESSMENT
TO THE LOWER GILA NORTH MANAGEMENT FRAMEWORK
PLAN & THE LOWER GILA SOUTH,... U.S.
DEPARTMENT OF THE INTERIOR... FEBRUARY 2000

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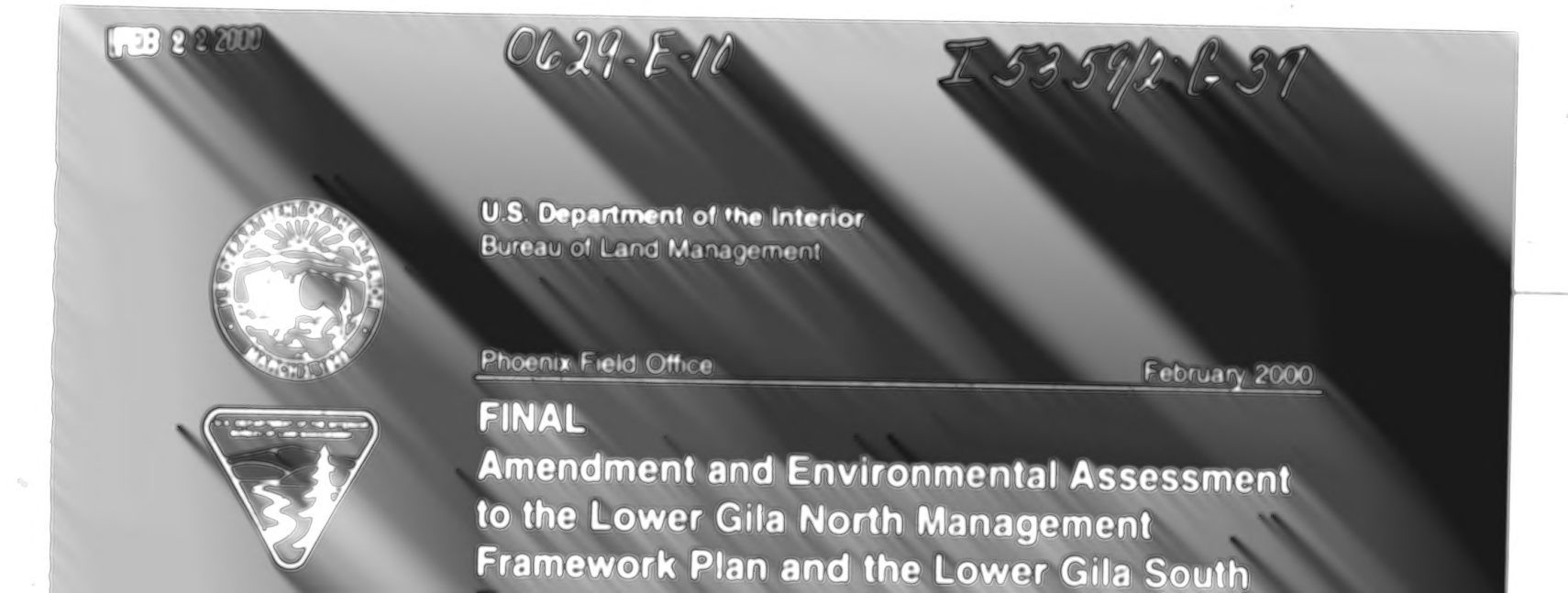

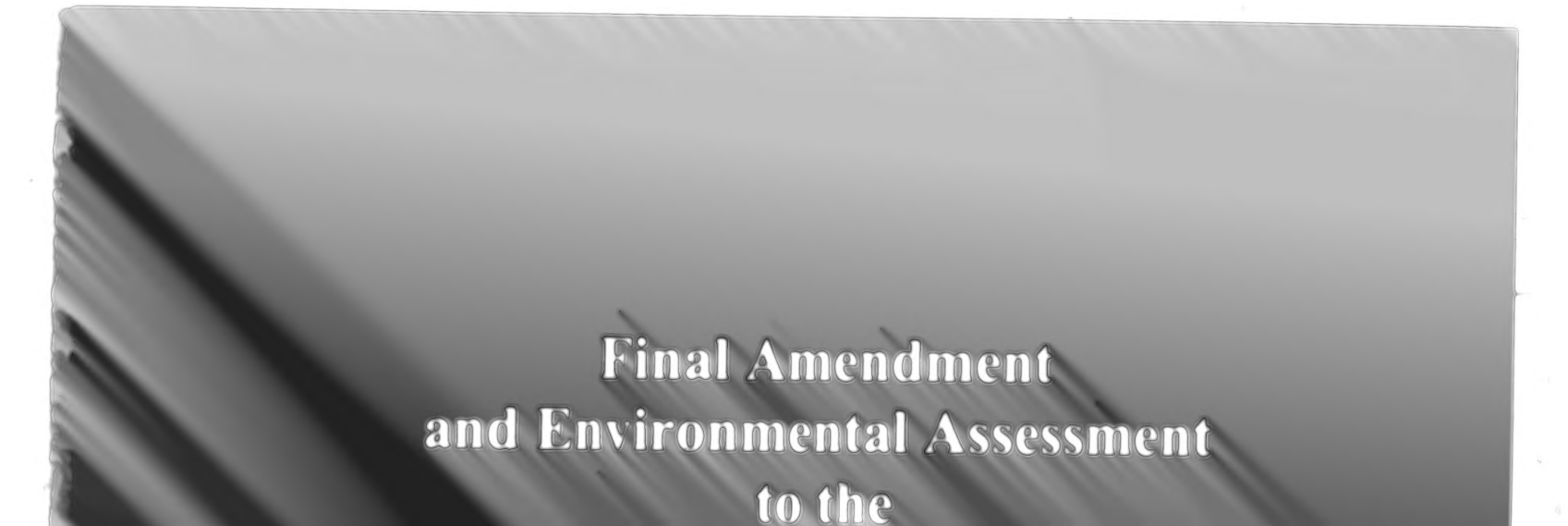

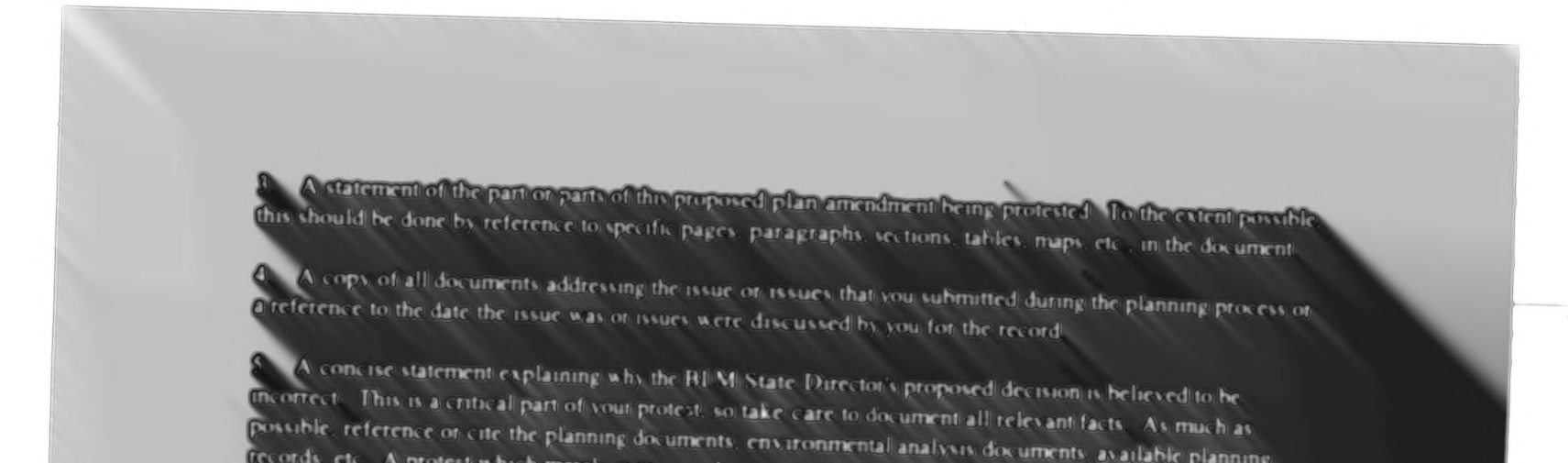
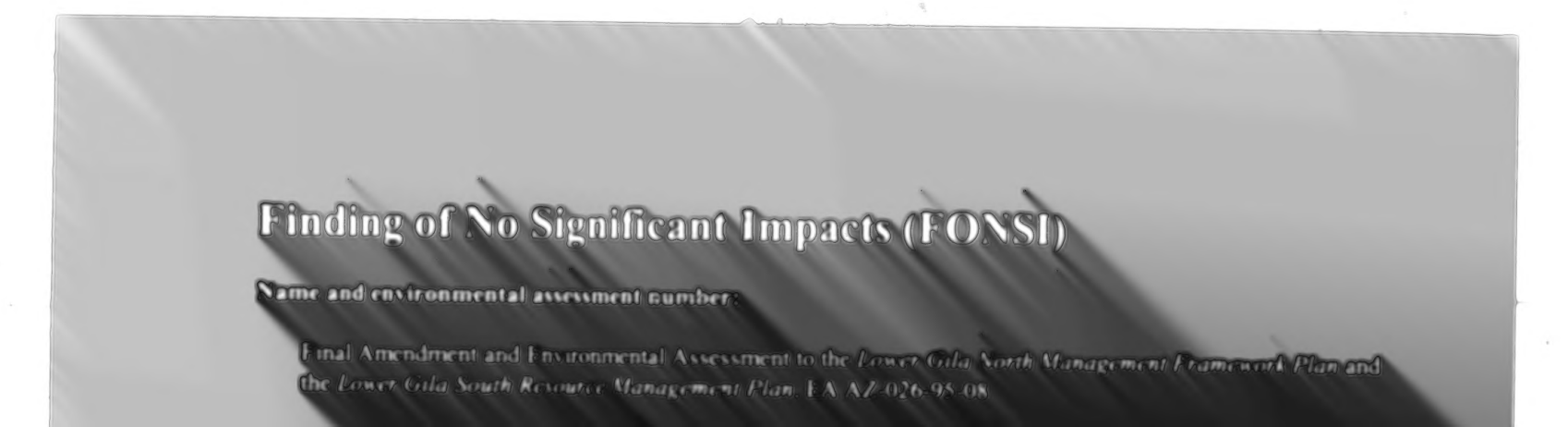
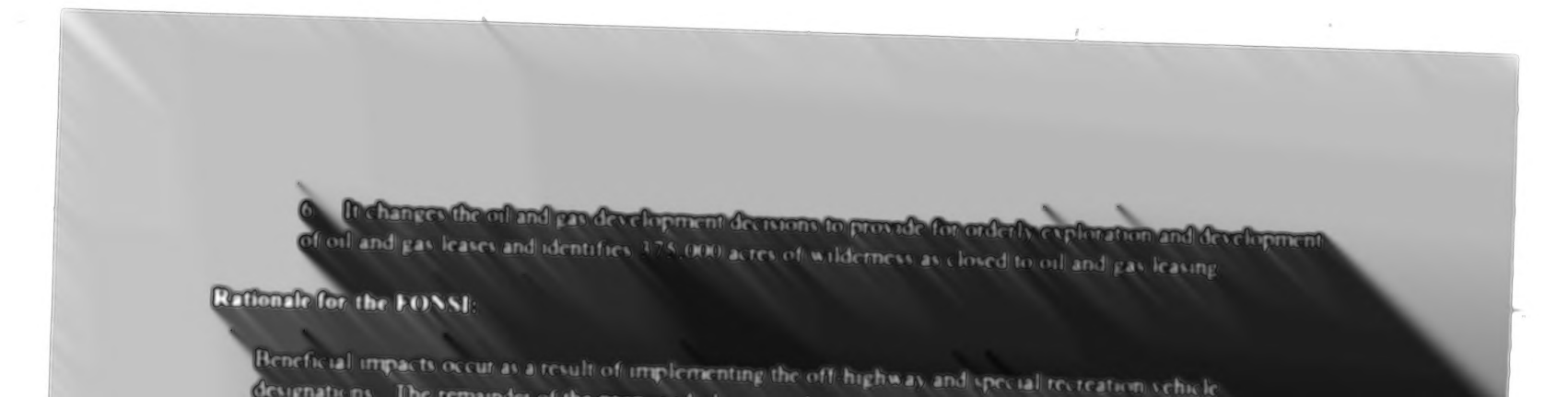

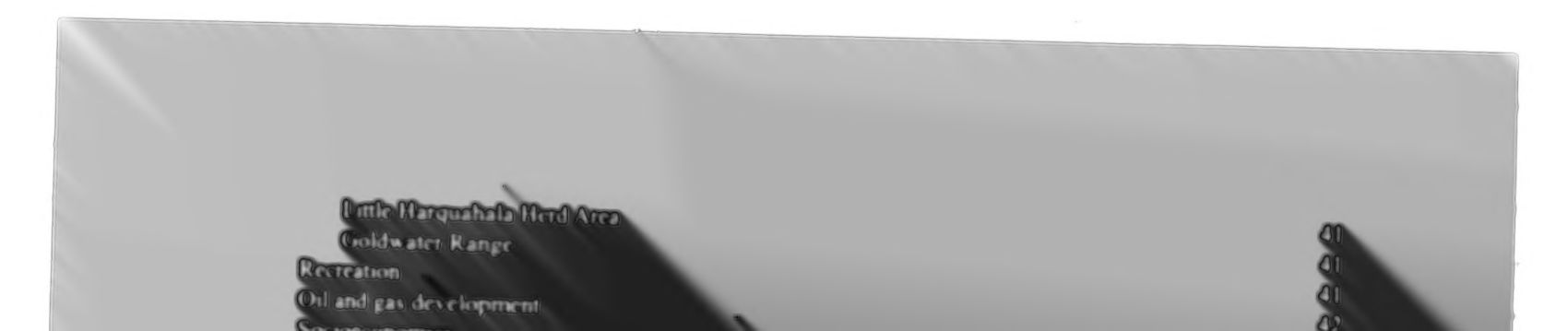

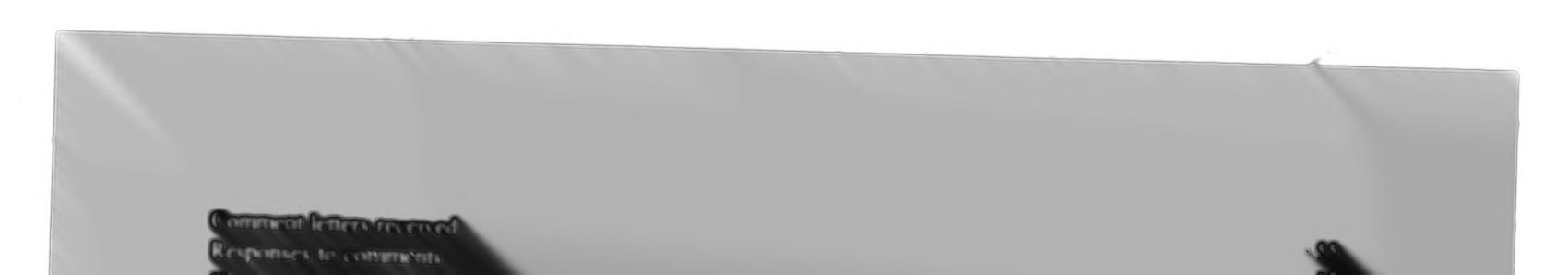

U.S. Department of the Interior
Bureau of Land Management

Phoenix Field Office February 2000

# FINAL
# Amendment and Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan

2000-011220/NF

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The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that take into account the long term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness and natural, scenic, scientific and cultural values.

BLM/AZ/PL-00/002

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# Final Amendment and Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan

January 2000

U.S. Department of the Interior
Bureau of Land Management

Phoenix Field Office, Arizona

EA AZ-026-95-08

Denise P. Meridith
State Director, Arizona

II

**United States Department of the Interior**
**BUREAU OF LAND MANAGEMENT**
Phoenix Field Office
2015 West Deer Valley Road
Phoenix, AZ 85027-2099

In reply refer to:

Dear reader:

The document accompanying this letter is the Final Amendment and Environmental Assessment to the *Lower Gila North Management Framework Plan* and the *Lower Gila South Resource Management Plan*. This document also contains the finding of no significant impacts (FONSI). The proposed plan responds to public and agency comments on the draft plan amendment and environmental assessment and represents the Bureau of Land Management (BLM's) preferred alternative. In the proposed plan, changes from the draft in the main text are indicated in ***bold italic*** type.

The enclosed summary provides an update on what the proposed plan contains. The enclosed FONSI denotes that the final environmental analysis indicated no significant impacts on the human environment.

The resource management planning process includes an opportunity for administrative review through a protest to the BLM Director if you believe the proposed plan amendment to be in error (43 Code of Federal Regulations [CFR] 1610.5-2). Careful adherence to these regulations will assist in preparing a protest that will assure the greatest consideration to your point of view.

Only those persons or organizations who participated in the planning process leading to this plan amendment may protest. If our records do not indicate that you had any involvement in any stage in the preparation, your protest will be dismissed without further review. A protesting party may raise only those issues which he or she submitted for the record during the planning process.

The protest period extends for 30 days with no provision for a time extension. To be considered timely, a protest must be postmarked no later than 30 days after the notice of availability has been published in the Federal Register, scheduled for February 15, 2000. We suggest that you send your protest by certified mail, return receipt requested.

Protests must be filed (mailed) in writing to:

Director (480)
Bureau of Land Management
Resource Planning Team
1849 C Street, N.W.
Washington, D.C. 20240

To be considered complete, a protest must contain, at a minimum, the following.

1. The name, mailing address, telephone number and interest of the person filing the protest.

2. A statement of the issue or issues being protested.

3. A statement of the part or parts of this proposed plan amendment being protested. To the extent possible, this should be done by reference to specific pages, paragraphs, sections, tables, maps, etc., in the document.

4. A copy of all documents addressing the issue or issues that you submitted during the planning process or a reference to the date the issue was or issues were discussed by you for the record.

5. A concise statement explaining why the BLM State Director's proposed decision is believed to be incorrect. This is a critical part of your protest, so take care to document all relevant facts. As much as possible, reference or cite the planning documents, environmental analysis documents, available planning records, etc. A protest which merely expresses disagreement with the Arizona State Director's proposed decision, without data, will not provide the benefit of your information and insights. In this case, the BLM Director's review will be based on the existing analysis and supporting data.

Please call Hector Abrego or me for additional information at (623) 580-5500. Thank you for your interest and participation in this process.

Sincerely,

Michael A. Taylor
Manager
Phoenix Field Office

Attachment

# Finding of No Significant Impacts (FONSI)

**Name and environmental assessment number:**

Final Amendment and Environmental Assessment to the *Lower Gila North Management Framework Plan* and the *Lower Gila South Resource Management Plan*, EA AZ-026-95-08

**BLM office:**

***Phoenix Field Office, referred to as*** the Lower Gila Resource Area, Phoenix District ***until 1997***

**Finding of No Significant Impacts:**

I have reviewed the Final Amendment and Environmental Assessment and have determined that the proposed action will have no significant impacts on the human environment. An environmental impact statement (EIS) is not required.

**Summary of the Proposed Action:**

The proposed plan amends the land tenure adjustment, desert tortoise habitat management, desert bighorn sheep augmentation and reestablishment, wild horse and burro management, recreation management and oil and gas development decisions made in the *Lower Gila North Management Framework Plan* and the *Lower Gila South Resource Management Plan* as follows.

1. It changes the land tenure adjustment decisions by reducing the number of acres available for disposal from approximately 62,260 acres to 34,100 acres, establishes guidelines for acquiring high resource value lands within five management areas, provides for exchanges to reposition lands within all of the management areas and establishes the framework to dispose of federal minerals under nonfederal surface estate and to acquire nonfederal mineral estate under federal surface estate.

2. It changes the desert tortoise habitat management decisions by standardizing desert tortoise habitat management by incorporating the goals and objectives in *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan* (BLM 1988) and *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona* (BLM 1990).

3. It changes the desert bighorn sheep augmentation and reestablishment decisions by expanding areas, through site-specific proposals, that may be augmented and reestablished.

4. It changes the wild burro management decisions by establishing the Harquahala, Little Harquahala and Painted Rock herd areas as herd management areas. These areas, along with the existing Alamo Herd Management Area, will be managed to support populations of wild burros in a thriving natural ecological balance.

5. It changes the recreation management decisions from maintaining existing recreational opportunities and facilities to one that provides resource-based recreational opportunities ranging from recreational site facilities, such as campgrounds, to remote primitive areas with predominantly unconfined recreational opportunities and minimal regulations. The proposal changes off-highway and special recreation vehicle designations and management, designates special recreation management areas, establishes a strategy to develop, manage and maintain camping facilities and stay limits and establishes guidance to address special uses and scarce opportunities.

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6. It changes the oil and gas development decisions to provide for orderly exploration and development of oil and gas leases and identifies 375,000 acres of wilderness as closed to oil and gas leasing.

**Rationale for the FONSI:**

Beneficial impacts occur as a result of implementing the off-highway and special recreation vehicle designations. The remainder of the proposed plan amendment focuses on providing direction and guidance in implementing future activity level plans and actions. Activity plans and other actions implemented as a result of the plan amendment will require additional scoping, consultation and National Environmental Policy Act (NEPA) documentation.

**Responsible Officials:**

Recommendation of finding: 1/20/00
Field Manager Date

Approval of finding: 1/20/00
State Director Date

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# Summary of Changes

## Comparison of Alternatives

The proposed action and the no action alternatives are summarized in Table 1 and compared with existing decisions. This table replaces Appendix A in the draft version which compared only the proposed action with the existing decisions.

The no action alternative is the guidance that directs current management actions. It differs from the existing decisions for desert tortoise, wild burros and oil and gas leasing due to national and state Bureau of Land Management (BLM) directives and the Interior Board of Land Appeals (IBLA) decisions.

An additional map following this page and preceding Chapter 1 shows the results of BLM boundary changes initiated since work began to create this document.

## Changes to the Draft Version

Additions and changes to the draft document are in ***bold italic*** type in this document. Major changes are listed below.

### Alternatives

- Reduced the amount of land proposed for disposal from approximately 45,260 acres to 34,000 acres.
- Retained land proposed for disposal adjacent to White Tanks Mountain Regional Park. Proposed to make it available for transfer only to governmental entities for recreation/park purposes.
- Expanded the management area boundaries slightly in several areas to retain more public lands and allow acquisition for riparian and wildlife corridors.
- Corrected the no action alternative for wild burros from total removal from three herd areas to the current management of burros as free-roaming, self-sustaining populations in a thriving natural ecological balance with other multiple-use resource components.
- Corrected and enlarged the maps of the burro herd areas.
- Changed the proposed designation of bicycles, ultralight aircraft, hang gliders and other mechanized transportation from "off-highway vehicles" to "special recreation vehicles."
- Proposed to designate all wildernesses as Class 1 Visual Resource Management, and refine classifications during interdisciplinary planning.
- Proposed to adopt Recreation Opportunity Spectrum classifications, and refine them during interdisciplinary planning. Included a map of the classifications.
- Clarified that off-highway vehicle race courses are on preexisting roads and trails.
- Clarified that proposed camping areas in desert tortoise habitat will be prohibited or mitigated depending on habitat category and type of camping area.
- Changed the proposed number of oil and gas leases to be issued from approximately 20 to an unspecified number (the number of exploration wells permitted to be drilled remains at 10).

### Environmental Consequences

- Expanded the no action and proposed action consequences from desert tortoise to livestock, wild burros, wildlife and ranchers.
- Expanded the no action and proposed action consequences from desert bighorn sheep to livestock, wild burros, hunters and recreationists.
- Corrected and expanded the no action and proposed action consequences from wild burros to livestock, threatened or endangered species, wildlife, water quality, riparian, ranchers, hikers, campers and wilderness visitors.
- Corrected and expanded the no action and proposed action consequences from recreation to areas of critical environmental concern, air quality, cultural resources, threatened or endangered species, wildlife, wetlands and riparian zones, local communities and recreationists.

# BLM Managed Lands Affected by Decisions in the Lower Gila Resource Management Plan Ammentment

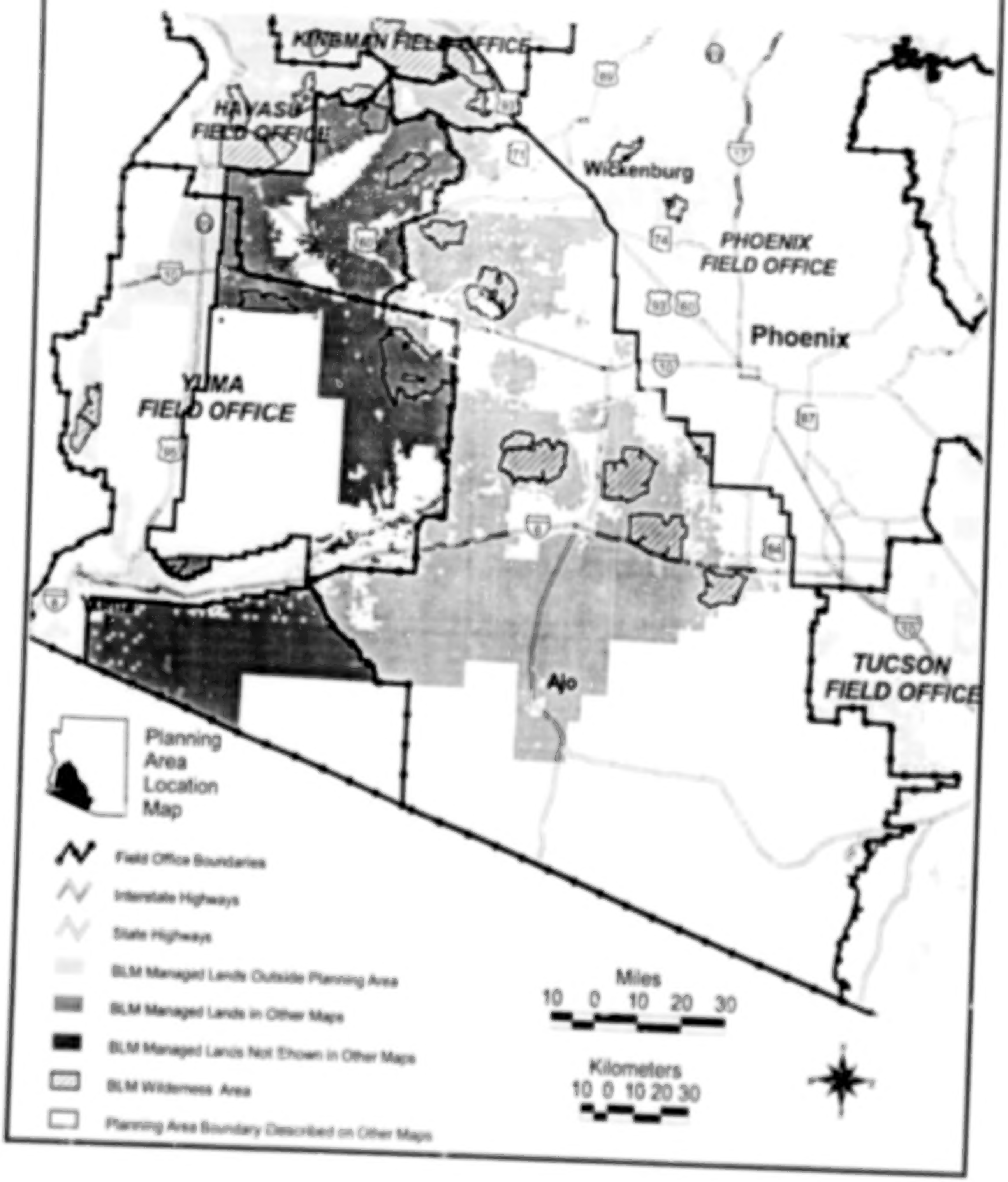

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**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Land tenure adjustments** | | |
| North<br>L-4.1 Dispose of approximately 26,700 acres when possible (because they are isolated and difficult to manage). Include disposal of lands identified for sale through the Asset Management Program (acreage not listed). Write an environmental assessment with public input before the final decision is made to dispose of listed land.<br>South<br>Make approximately 73,000 acres available for disposal.<br>Propose to dispose of approximately 23,000 acres of federal minerals underlying state and private surface. | Make approximately 62,300 acres available for disposal. Due to disposal, withdrawal, administrative transfer and wilderness designation, approximately 6,900 acres remain for disposal in Lower Gila North and approximately 55,400 acres remain for disposal in Lower Gila South.<br>Continue to dispose of federal subsurface estate under nonfederal surface estate on a case-by-case basis. | Make approximately 34,100 acres outside of the five management areas available for disposal. Environmental analysis with public input is required for every disposal action.<br>Retain all public lands, approximately 3,043,900 acres within the five management areas, unless needed for recreation and public purposes. Disposals allowed under the Recreation and Public Purposes Act will be considered on a case-by-case basis.<br>Same as under the no action alternative for subsurface estate.<br>Allow exchanges to reposition lands within each management area. |
| North<br>No retention decisions.<br>South<br>No retention decisions. | Retain all public lands not identified for disposal. | Retain all public lands, approximately 3,043,900 acres within the five management areas, unless needed for recreation and public purposes. Disposals allowed under the Recreation and Public Purposes Act will be considered on a case-by-case basis. |
| North<br>No acquisition decisions.<br>South<br>Identify approximately 37,000 acres for acquisition.<br>Propose to acquire approximately 112,000 acres of state and private minerals underlying federal surface. | Identify approximately 10,700 acres of state land for acquisition.<br>Continue to acquire nonfederal subsurface estate under federal surface estate on a case-by-case basis. All acquisitions will be on an exchange basis among willing parties. | All nonfederal lands with high resource values within the five management areas may be considered for acquisition. All acquisitions will be on an exchange basis among willing parties. There are approximately 288,800 acres of nonfederal land within the management areas.<br>Same as under the no action alternative for subsurface estate.<br>Allow exchanges to reposition lands within each management area. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| North<br>WL-2.5 Protect bighorn sheep lambing areas and a two-mile buffer (20,000 acres) in the Harquahala and Little Harquahala mountains from disturbances created by land disposal, etc.<br>WL-3.3 Protect significant cliffs and a two-mile zone (18,000 acres) (for eagles, falcons and owls) in the Big Horn and Vulture mountains from land disposal, etc. Protection zones for golden eagles will not exceed a ¼-mile radius unless the need for a larger zone is identified on a case-by-case basis.<br>South<br>No land tenure decisions based on plants or animals. | Same as under existing decisions. Lands will be retained for significant resources. Parts of Peoples Canyon and the Big Horn Mountains are in wilderness and cannot be disposed of; the Yuma Field Office manages the Little Harquahala Mountains and the Bill Williams River is managed by the Lake Havasu Field Office. | Same as under the no action alternative. The Harquahala, Big Horn and Vulture mountains will be in the Big Horn Management Area and therefore will be retained. The Santa Maria River and Grapevine Springs will be in the Santa Maria Management Area and therefore will be retained. |
| **Desert tortoise habitat management** | | |
| North<br>WL-5.1 Incorporate into the grazing systems the recommendation to rest tortoise habitat from livestock use between February and July, as allotment management plans are written for allotments containing crucial desert tortoise habitat. Monitor and adjust the number of livestock or season of use on allotments which do not receive intensive management. May fence out tortoise populations after contact with interested user groups.<br>WL-6.3 Monitor livestock use on the Ohaco Allotment, especially between February 1 and June 30, in crucial tortoise areas. Adjust use based on range monitoring. | Manage desert tortoise habitat by category and according to guidance in *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan* and *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona*. | Same as under the no action alternative except to formally adopt the *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona* and to add specific management actions to its objectives.<br>- Participate in public events with tortoise habitat information; develop a tortoise brochure.<br>- Formally adopt the categories of desert tortoise habitat and revise them as more information becomes available. Consider locations for additional one-mile-square study plots. Re-read all one-mile-square plots every five years. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
*(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)*

| **Existing decisions -- *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Desert tortoise habitat management (continued)**<br>South<br>Determine potential impacts of new livestock waters within two miles of crucial tortoise habitat and/or crucial desert bighorn sheep habitat on a case-by-case basis. Mitigate significant impacts with appropriate stipulations on site relocation. | | - Maintain a record of environmental assessments containing tortoise stipulations and provide an annual summary to the BLM Arizona State Office.<br>- Comply with the Endangered Species Act and BLM policy to assure that the Sonoran population of desert tortoise does not become threatened or endangered through BLM actions.<br>- Continue to work with and support other agencies and publics concerning tortoises and their habitat.<br>- Forward proposals on research to ensure the viability of populations and habitats to the Desert Tortoise Management Oversight Group.<br>- Establish management areas to protect corridors, facilitate management and provide units for ecosystem management.<br>- Include goals and objectives for categorized habitat in this amendment. Include specific objectives at the interdisciplinary plan level.<br>- Address and include mitigation measures in decision documents to offset loss of quality or quantity of tortoise habitat in categories I and II.<br>- Retain lands in the management areas and consolidate lands within them on an exchange basis among willing parties.<br>- Authorize new land use in all categories only if no reasonable alternative exists. Evaluate mitigation to meet the goal of no net loss.<br>- Designate off-highway and special recreation vehicle travel as "limited."<br>- Consider the forage needs of desert tortoise and the ecological site potential in determining and prioritizing efforts to resolve conflicts with livestock use. In categories I and II habitats, allow only those range improvements for livestock which will not conflict with tortoise populations or habitat. Mitigation for such conflicts is permissible to make the net effect of the improvements positive or neutral to the tortoise. |

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Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative
*(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)*

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Desert tortoise habitat management (continued)** | | Conflicting improvements should be removed or modified to mitigate the conflict as opportunity arises.<br>- Manage burros in a thriving natural ecological balance with other multiple-use resource components.<br>- Coordinate with the Arizona Game and Fish Department on augmentation and reestablishment of desert bighorn sheep on a case-by-case basis.<br>- Allow new wildlife improvements in category I and II habitats if they do not conflict with tortoise populations or habitat.<br>- Collect information on predation of tortoises as opportunities arise. Evaluate BLM actions to assure that they do not encourage the proliferation or range expansion of predators.<br>- Restrict boulder sales to areas that will result in no net loss of tortoise habitat or range expansion of predators. |
| **Desert bighorn sheep augmentation and reestablishment** | | |
| North<br>WL-2.7 Allow reintroduction of desert bighorn sheep into the Black and Weaver mountains and allocate forage for a reasonable population level one year before reintroduction.<br>South<br>No augmentation or reestablishment decisions. | Authorize reestablishment of desert bighorn sheep in the Black Mountains. In the rest of the Lower Gila North and South planning units, augmentations will be considered on a case-by-case basis with environmental analysis and public input. The Weaver Mountains are managed by the Phoenix Field Office. | Identify all mountain ranges as current or historic desert bighorn sheep habitat. Allow augmentation or reestablishment where conflicts with other uses or resources do not occur or can be resolved. Final decisions will be considered on a case-by-case basis with environmental analysis and public input. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| ***Existing decisions – Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| | **Wild horse and burro management** | |
| North<br>RM-3.1 Maintain a viable, color-diverse burro population of 200 burros in the Alamo Herd Management Area. Reduce the burro numbers to zero in the remaining herd areas (Little Harquahala and Harquahala) by 1986.<br>RM-3.2 Maintain free access for wild burros to livestock-watering facilities in the Alamo Herd [sic] Area.<br>RM-3.3 Maintain access to Alamo Lake for the burros in the Alamo Herd Management Area.<br>RM-3.5 Limit or modify construction of new structures within herd management areas which would restrict burro movement.<br>WL-2.5 Protect bighorn sheep lambing areas and a two-mile buffer (20,000 acres) in the Harquahala and Little Harquahala mountains from disturbances created by burro use, etc.<br>WL-2.2 Reduce competition among big game, livestock and burros by reducing livestock aggregations and removing all burros at waters in the Big Horn, Granite Wash and Harquahala mountains.<br>WL-3.3 Protect significant cliffs and a two-mile zone (18,000 acres) (for eagles, falcons and owls) in the Big Horn Mountains and Vulture Mountain areas from burro overuse, etc. Protection zones for golden eagles will not exceed a ¼-mile radius unless the need for a larger zone is identified on a case-by-case basis.<br>South<br>Prepare a burro capture plan and remove all burros from the Painted Rock Reservoir area. | Manage burros in designated herd areas as free-roaming, self-sustaining populations of the optimum number of burros in thriving natural ecological balance with other multiple-use resource components ***as determined by manageability determinations and monitoring, research and analysis of resource use*** as mandated the Wild and Free-Roaming Horse and Burro Act of 1971 as interpreted by a 1989 Interior Board of Land Appeals (IBLA) decision. Remove burros that exceed the thriving natural ecological balance.<br>Same as under the existing decisions except for RM-3.1 and Lower Gila South. The Vulture Mountains and part of the Big Horn Mountains are not in herd areas. Parts of Peoples Canyon and the Bighorn Mountains are in wilderness. The Little Harquahala Herd Area and the Little Harquahala and Granite Wash mountains are managed by the Yuma Field Office. | Same as under the no action alternative except that ***if appropriate following a manageability determination and monitoring, research and analysis of resource use to determine the number of burros that can be maintained in a thriving natural ecological balance with the environment on public lands in each herd area, it is proposed that the Harquahala, Little Harquahala and Painted Rocks herd areas*** be established as herd management areas. Subsequent plans will be done for all herd management areas including Alamo. Monitoring will determine what constitutes a thriving natural ecological balance. Range improvements and habitat projects may be modified on a case-by-case basis so as to not significantly affect burros. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
*(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)*

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Wild horse and burro management (continued)**<br>North<br>No burro decisions for joint management lands.<br>South<br>No burro decisions for joint management lands. | | |
| Goldwater Range<br>Inventory the Goldwater Range burro population. Prepare a plan to remove unclaimed burros from the range. Process the burros through the adoption program or sell, depending upon ownership. | There are no unclaimed burros on the Goldwater Range. | Collaborate with the Air Force, Tohono O'odham Nation and the Bureau of Indian Affairs to maintain the boundary fence between the Goldwater Range and the Papago Reservation to keep out burros. |
| **Recreation management – General** | | |
| North<br>RM-3.4 Designate a burro viewing route in the Alamo Herd Management Area and install interpretive signs.<br>South<br>No recreation decisions about burros. | Same as under the existing decisions. The Lake Havasu Field Office has the lead. | Same as under the no action alternative. |
| North<br>Recognize areas proposed as Visual Resource Management classes II, III and IV. Manage visual resources using existing utility corridors.<br>South<br>Continue to evaluate visual resources as part of planning. Attach stipulations as appropriate. Public lands where classes have not been established will be managed as Class III. Wildernesses will be managed as Class I.<br>North<br>No Recreation Opportunity Spectrum decisions.<br>South<br>No Recreation Opportunity Spectrum decisions. | Same as under the existing decisions.<br>Provide a systematic process to identify recreation values and make decisions which ensure that these values are maintained to meet recreational needs. | Same as under the no action alternative except to designate all wildernesses including the Harcuvar, Rawhide, Eagletail and New Water mountains within the Lake Havasu Field Office area as Class I, review and refine the classifications during all interdisciplinary planning and give priority evaluation of classifications to scenic corridors and backcountry byways.<br>Adopt the Recreation Opportunity Spectrum classifications as a management tool to evaluate recreation opportunities and developments. Review and refine the classifications during interdisciplinary planning. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component One: Off-highway vehicle designation and management** | | |
| North<br>No off-highway vehicle decisions.<br>South<br>Limit off-highway vehicle use to existing and/or designated roads, trails and vehicle routes.<br>Permit cross-country vehicle travel only when a specific authorized task requires it and only in areas where use would not cause unnecessary or undue resource damage. Off-highway vehicle closures may be made in areas where such use causes irreparable harm to resources. Other designations (closed or open) will be made through the planning process as warranted. | Same as under the existing decisions.<br>Wildernesses established by Congress are closed to mechanized use.<br>Permit off-highway vehicle racing using existing roads and trails on a case-by-case basis. | Designate public lands described in the *Lower Gila North Management Framework Plan* and *Lower Gila South Resource Management Plan* as "limited." Limit off-highway vehicles and special recreation vehicles to existing and/or designated roads, trails and vehicle routes. This includes lands transferred to the Phoenix, Lake Havasu and Yuma field offices.<br>Conduct site-specific inventories to designate existing roads, trails and vehicle routes as needed.<br>Evaluate roads and trails once used as race courses for no action, closure, rehabilitation or upgrading and authorization as a course. |
| Goldwater Range<br>Designate the Goldwater Range as "limited," with vehicles restricted to designated routes in areas of critical environmental concern and established routes elsewhere. | | Maintain current guidance –<br>Same as under the existing decisions and no action alternative for:<br>· road or area closures except to include special recreation vehicles,<br>· cross-country vehicle travel (off-highway and special recreation vehicles),<br>· the Goldwater Range and<br>· wildernesses. |

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| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component One (continued)**<br>North<br>R-5.3 Close Grapevine Springs (approximately 50 acres) and Peoples Canyon to off-highway vehicles.<br>WL-7.1 Restrict all uses or developments incompatible with protection of the 5,000-acre open chaparral basin and areas below it to the east in the Harquahala Mountains to the extent possible under existing regulations.<br>WL-2.5 Protect bighorn sheep lambing areas and a two-mile buffer (20,000 acres) in the Harquahala and Little Harquahala mountains from disturbances created by intense recreational use and development, and off-highway vehicle use on other than existing roads and trails, etc.<br>W-4.13 Restrict all uses or developments incompatible with protection of the 7,000-acre Harquahala Mountains Significant Botanical Area to the extent possible under existing regulations.<br>South<br>No recreation decisions based on plants or animals. | Same as under the existing decisions. Parts of Peoples Canyon and the Harquahala Mountains are in wilderness. WL-7.1 and W-4.13 refer to the same 5,000-acre area. The Yuma Field Office manages the Little Harquahala Mountains and the Bill Williams River is managed by the Lake Havasu Field Office. Grapevine Springs is in the Three Rivers Riparian Area of Critical Environmental Concern where vehicles are limited to designated roads and trails. | Plan and develop single- or multiple-use off-highway vehicle and special recreation vehicle areas and routes and management strategies through interdisciplinary plans. Planning shall address "limits of acceptable change" indicators and standards, and address conflicts, issues and solutions to vehicle management problems.<br>Develop off-highway vehicle and special recreation vehicle brochures, maps and information sheets and disseminate to the public. |
| North<br>No recreation decisions about areas of critical environmental concern.<br>South<br>Close the Vekol Valley Grassland and Coffeepot Botanical areas of critical environmental concern to off-highway vehicle use. | Retain the "closed" designation for the Vekol Valley Grassland and the Coffeepot Botanical areas of critical environmental concern. | Designate the Vekol Valley Grassland and the Coffeepot Botanical areas of critical environmental concern as "limited to designated routes only" for off-highway and special recreation vehicles. |

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| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component Two: Designation of special recreation management areas** | | |
| North<br>R-1.1 Designate Vulture Mine Road from Route 60 to Vulture Mine as a scenic drive and establish a scenic corridor ½-mile on either side of the road. Interpret through signing the scenery, geology and botany in one area along the Vulture Mine Road.<br>R-2.1 Establish and mark a hiking and equestrian trail system near Wickenburg. The width and exact routing will be determined in close consultation with concerned publics. Work with the Desert Caballeros to establish a trail system between Wickenburg and Wagoner to ensure continuous management on public lands.<br>R-4.1 Do not allow new roads in the Saddle Mountain area but designate it as a recreation and rockhound area. No lands will be acquired in this area.<br>R-6.1 Develop a recreation brochure for Lower Gila North. Increase public contact by using suggestion boxes at interpretive sites.<br>WL-3.3 Protect significant cliffs and a two-mile zone (18,000 acres) (for eagles, falcons and owls) in the Big Horn and Vulture mountains from intense recreational use or development, etc. Protection zones for golden eagles will not exceed a ¼-mile radius unless the need for larger zones is identified on a case-by-case basis. Especially protect these areas from disturbing human activities between February 1 and May 1 each year.<br>South<br>No decisions for projects based on plants and animals. | Same as under existing decisions. The lands between Wickenburg and Wagoner are managed by the Phoenix Field Office. Part of the Big Horn Mountains is protected through wilderness designation. | Establish the Vulture Mountains, Gila Trail, Saddle Mountain and Ajo special recreation management areas. Complete interdisciplinary planning with public involvement which will establish boundaries, determine type and level of facility development, resolve and mitigate impacts to other resources, evaluate and refine Recreation Opportunity Spectrum and Visual Resource Management classes, improve recreational opportunities and reduce conflicts among land users. Revise the plans for the Crater Range and Sentinel Plain Lava Flow special recreation management areas.<br>For the four listed above and the existing Crater Range and Sentinel Plain Lava Flow special recreation management areas:<br>· authorize facilities and maintenance to protect resources and improve visitor safety and recreational opportunities,<br>· develop single- and multiple-use trails to meet the demand for hiking, equestrian and mountain biking and<br>· provide brochures, signing and regulations as needed.<br>For the four special recreation management areas listed above:<br>· designate off-highway and special recreation vehicle routes when needed for site-specific resource protection.<br>Specifically for the Vulture Mountains Special Recreation Management Area:<br>· emphasize diverse recreational opportunities including nature and history interpretation, trails, camping and off-highway and special recreation vehicle areas. |

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**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component Two (continued)**<br>Goldwater Range<br>Prepare plans or prescriptions for the Crater Range Special Recreation Management Area. Within the constraints of the ongoing military mission:<br>- limit vehicle use to designated roads,<br>- establish point-of-interest interpretive and picnic facilities,<br>- establish the road on the west boundary of the area as a scenic jeep trail and develop appropriate signing and interpretive services,<br>- establish the portion of State Route 85 bisecting the special recreation management area as a scenic byway with a one-mile-wide scenic corridor, if the U.S. Air Force concurs and it satisfies BLM and Arizona Department of Transportation standards and<br>- eliminate or reduce visual impacts from new powerline facilities in the Ajo-to-Gila Bend corridor using Visual Resource Management; protect all views from highway and other potential public viewing points; and use land paralleling the railroad on the east side of the area for any future below-ground utility rights-of-way, if the U.S. Air Force concurs.<br><br>Prepare plans or prescriptions for the Sentinel Plain Lava Flow Special Recreation Management Area. Within the constraints of the ongoing military mission:<br>- limit vehicle use to designated roads,<br>- establish point-of-interest interpretive signing and facilities,<br>- prohibit new rights-of-way and other land use authorizations except in the Interstate 8 corridor; encourage below-ground installation of utilities in the corridor south of Interstate 8 and<br>- minimize visual impacts (from rights-of-way construction in the Interstate 8 corridor) to geologic formations by using Visual Resource Management. | | Specifically for the Gila Trail Special Recreation Management Area:<br>- authorize facilities in the rural, roaded natural and semi-primitive motorized classes.<br><br>Specifically for the Saddle Mountain Special Recreation Management Area:<br>- emphasize geology, culture and wildlife interpretation, promotion of recreation opportunities and protection of scenic landscapes and vistas and<br>- authorize facilities in the northern and eastern portions of the area. Maintain the southern and western portions as mostly undeveloped.<br><br>Specifically for the existing Crater Range and Sentinel Plain Lava Flow special recreation management areas:<br>- adjust boundaries through interdisciplinary planning to respond to changing land and recreation uses.<br><br>Conduct project level planning for the extensive recreation management area on a case-by-case basis and:<br>- authorize primitive facilities where needed to protect resources, improve visitor safety or recreation experience or increase recreational opportunities,<br>- establish camping locations and stay limits, off-highway and special recreation vehicle use areas and utilization levels of natural resources and<br>- evaluate long- and short-term camping areas, commercial or competitive off-highway and special recreation vehicle areas, scenic turnouts, cultural interpretive sites, hiking, equestrian and mountain bike trails, road signage and maintenance. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component Three: Development, maintenance and management of camping facilities and stay limits** | | |
| North<br>No general camping decisions.<br>South<br>No general camping decisions. | Allow camping up to 14 days at any location not closed to camping. This applies to all public lands in the Lower Gila North and South planning units and those lands transferred to the Yuma and Kingman field offices. Areas may be closed for resource protection or rehabilitation, or to reduce conflicts with other uses. Other regulations and conditions may be identified. | Same as under the no action alternative except for designated camping areas. |
| North<br>No decisions for long-term camping areas.<br>South<br>No decisions for long-term camping areas. | There are no long-term camping areas. | Establish long-term visitor areas where needed. Define the long-term visitor area on the ground with signs or fences. Designate roads and campsites and provide amenities.<br>Interdisciplinary planning may modify the following limits, conditions and regulations. After the camping area is operating, modifications will require public notification.<br>Limit the long-term visitor area to a location:<br>· in a rural or roaded natural Recreation Opportunity Spectrum class,<br>· with rocky or resilient soils, and well-maintained access,<br>· within 30 miles of a community,<br>· "not likely to adversely affect" threatened or endangered species or their habitats and<br>· outside of burro herd management areas, riparian areas, areas of critical environmental concern, wild and scenic river areas, places with cultural resource conflicts and category I and II desert tortoise habitats. |

**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component Three (continued)** | | Mitigate impacts if the long-term visitor area is in Category III desert tortoise habitat.<br>Users of long-term visitor areas will:<br>- comply with long-term visitor area regulations,<br>- be restricted to designated sites and terms of the permit,<br>- comply with all local, state and federal laws,<br>- abide by supplemental rules that will be enacted as needed and<br>- pay for services such as firewood, sanitation, trash, water, etc. |
| North<br>No decisions for extended-stay camping areas.<br>South<br>No decisions for extended-stay camping areas. | There are no extended camping areas. | Authorize "extended camping areas" as needed. Define the extended camping areas on the ground with signs or fences.<br>Designate roads and campsites and/or areas and provide amenities.<br>Interdisciplinary planning will evaluate areas with similar historic use and new areas that are suitable. Interdisciplinary planning may modify or add to the following limits, conditions and regulations.<br>Limit the extended camping areas to locations:<br>- in a rural, roaded natural or semi-primitive motorized Recreation Opportunity Spectrum class,<br>- with rocky or resilient soils, suitable access and topographic or vegetative screening,<br>- within 30 miles of a community,<br>"not likely to adversely affect" threatened or endangered species or their habitats |

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**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**
***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan* and *Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component Three (continued)** | | - outside of burro herd management areas, riparian areas, areas of critical environmental concern, wild and scenic river areas, places with cultural resource conflicts and Category I desert tortoise habitats.<br>Mitigate impacts if the extended camping area(s) is/are in category II or III desert tortoise habitat.<br>Users of extended camping areas will:<br>- be restricted to designated sites,<br>- comply with all local, state and federal laws,<br>- abide by supplemental rules that will be enacted as needed and<br>- pay for services such as firewood, sanitation, trash, water, etc. |
| North<br>No decisions for short-term camping areas.<br>South<br>No decisions for short-term camping areas. | There are no designated short-term camping areas. | Authorize short-term camping areas with stays of 14 days or less and a season of use for resource protection, equitable visitor use and overflow camping. Locate in areas where all conflicts can be mitigated. Interdisciplinary planning will evaluate areas with similar historic use and new areas that are suitable. Define the short-term camping areas on the ground with signs or fences. Interdisciplinary planning may modify or add to the following limits, conditions and regulations.<br>Limit short-term camping areas to locations:<br>- with rocky or resilient soils, and primitive access,<br>- "not likely to affect" threatened or endangered species or their habitats and<br>- outside of burro herd management areas, areas of critical environmental concern, wild and scenic river areas, places with cultural resource conflicts and wildernesses.<br>Mitigate impacts if the short-term camping area(s) is/are in category I, II or III desert tortoise habitat. |

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**Table 1. Comparison of existing decision, no action alternative (current guidance) and proposed action alternative**

***(this table replaces and expands an appendix table in the draft that compared existing plans with the proposed amendment)***

| **Existing decisions – *Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan*** | **No action alternative (current guidance)** | **Proposed action alternative (summary)** |
|---|---|---|
| **Recreation management – Component Three (continued)** | | Users of short-term camping areas will:<br>- be restricted to designated sites and terms and conditions of the particular area,<br>- comply with all local, state and federal laws,<br>- abide by supplemental rules that will be enacted as needed and<br>- pay for services such as firewood, sanitation, trash, water, etc. |
| **Recreation management – Component Four: Special uses and scarce opportunities** | | |
| North<br>R-3.1 Continue to protect and interpret the Harquahala Peak Observatory Site.<br>South<br>No special use area decisions. | Same as under existing decisions. | Evaluate and authorize development of special use areas using interdisciplinary planning. |
| **Oil and gas development** | | |
| North<br>M-1.1 Leave the area open to mineral (oil and gas) leasing.<br>South<br>Leasable minerals will be managed under the leasing regulations. | Handle oil and gas leases on a case-by-case basis and require a plan amendment for each action. | Issue leases subject to the standard terms and conditions. Operational permits may be approved after site-specific environmental analyses. A total of 10 wells may be drilled in the Lower Gila North and South planning units. |

# Chapter 1 --
# Introduction and Planning Process

## Introduction

This document complies with the regulations for implementing the National Environmental Policy Act ***of 1969*** issued by the Council on Environmental Quality (40 CFR 1500) and ***sections 202 and 201*** of the Federal Land Policy and Management Act ***of 1976, as amended*** (43 CFR 1600). It also complies with the BLM Planning Manual (1600 series) and Environmental Handbook (H-1790-1), the Arizona State Director Guidance for Resource Management Planning (H-1600-1) and the Arizona Environmental Handbook (H-1790-1).

The process for preparing a resource management plan amendment is described in the Planning Regulations (43 CFR 1600). This process incorporates the environmental analysis requirements of the National Environmental Policy Act and emphasizes public involvement and consistency with plans of state and other federal agencies.

An environmental assessment may be completed on a major planning amendment (43 CFR 1610.5-5) to identify any significant impacts resulting from the proposed management changes.

If significant impacts are identified, an environmental impact statement will be required for the amendment. Based on all professional studies and judgment, an environmental impact statement is not needed at this time. An environmental assessment is incorporated into the Lower Gila plan amendment to show if further National Environmental Policy Act analysis is needed.

In this document, the environmental impacts of implementing two alternatives are examined. One of these is the proposed BLM action and the other is the no action alternative, or continuation of current management guidelines.

A 60-day review and comment period provided the opportunity for public input regarding the alternatives before the final amendment ***was finished***.

## Purpose and Need for the Proposed Action

The purpose of this action is to amend the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan through one amendment -- and associated environmental assessment -- to enhance BLM management capabilities and resolve pertinent issues and conflicts. The purpose is consistent with the scope and nature of the Federal Land Policy and Management Act.

The need for this action has two parts: 1) expanded recreation management capabilities and improved resource protection and 2) implementation, through the land use plan, of internal directives and policy changes.

The ***Lower Gila North and South planning units experience*** heavy long-term visitor use through the winter months. The growth of Phoenix and surrounding communities also contributes to increased recreational use on the public lands. The BLM needs to expand management capability beyond dispersed recreation to facilitate long-term visitor and local recreation use and to provide for additional resource protection through consistent off-highway vehicle designations. Needed management changes include development of camping facilities and stay limits, designation of off-highway vehicle limits in nondesignated areas, identification of special recreation management areas and provisions for special uses. Expanded recreation management is the focus of this amendment.

The second part is implementation of BLM directives and policy changes through the land use planning process which provides for public involvement in compliance with the National Environmental Policy Act. This internal housekeeping is necessary to keep the land use plans current and in conformance with national priorities.

Arizona BLM has identified the need for all existing land use plans to be consistent with current BLM policy. Where necessary, both newer resource management plans and older management framework plans are being amended as the opportunity arises.

Both of the Lower Gila land use plans need to be made current regarding the listed aspects of the following programs.

-- Wild horse and burro management: ***Bring management into compliance with the Wild Horse and Burro Act as clarified by administrative and federal court decisions and BLM program guidance***.

-- Desert tortoise habitat management: Formalize habitat categories and adopt the national and statewide strategy plans.

-- Desert bighorn sheep augmentation and reestablishment: Establish objectives and distribution through the land use plan.

-- Oil and gas development: Analyze a reasonably foreseeable development scenario through the land use plan.

In addition, national BLM priorities are now focused on the maintenance of integral resource components such as ***categorized*** desert tortoise habitat, wildlife corridors, riparian habitat and cultural resources. The lands program provides the mechanism for retention or acquisition of these key resources and habitats. Where these resource components exist on lands currently identified for disposal, the BLM needs to evaluate this designation and determine if these lands should be retained.

# Conformance with Land Use Plans

The current planning effort and proposed changes were developed in conformance with the Federal Land Policy and Management Act, BLM planning regulations and the National Environmental Policy Act. A plan amendment and environmental assessment are required because much of the proposed guidance is not in conformance with existing plan decisions.

The amendment proposes to change the existing land use guidance for several activities. If implemented, the proposed ***actions*** will replace or modify decisions in the management framework plan and the resource management plan, as amended, for these activities. ***Table 1*** compares the existing decisions with ***current guidance (the no action alternative) and*** the proposed changes. The remaining decisions in the land use plans continue unchanged.

# Relationship to Statutes, Regulations and other Plans

The BLM ***has complied*** with the Endangered Species Act through ***formal and informal*** Section 7 consultation with the U.S. Fish and Wildlife Service on ***the proposed action***. The results of the consultation ***have been*** incorporated into the final document as ***Appendix B.***

***Additionally, the BLM will assess any future site-specific proposed actions that result from or tier from this plan amendment. The assessment will determine whether the actions may affect any species listed or proposed for listing, or any designated or proposed critical habitat. If such species or habitat would be affected by the action, the BLM will enter into consultation or conference with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act.***

Native American communities residing near an area of potential effect, or who have made their interest in an area known, will be specifically consulted on a number of occasions. Consultation will occur during the plan implementation to identify resource concerns such as access to native plants for traditional uses. Traditional leaders and others will be consulted to identify specific locations or sensitive areas where properties of traditional cultural or religious importance may require special protection and access.

Specific consultation will also occur as appropriate for compliance with the National Historic Preservation Act of 1966, as amended, the Archaeological Resources Protection Act of 1979 and the Native American Graves Protection and Repatriation Act ***of 1990***. The Native American Coordination and Consultation manual (BLM Manual 8160) will be used for guidance on consultation.

The Kingman Resource Management Plan ***established*** goals, objectives and management prescriptions for the Three Rivers Area of Critical

Environmental Concern, ***which are not altered by this plan amendment (see Appendix D)***. Public lands within ***this*** area of critical environmental concern along the Santa Maria River are administered by the ***Kingman Field Office. The Bill Williams River and Alamo Lake areas are now administered by the Lake Havasu Field Office.***

Several other tribal, agency and local plans are being developed concurrently with the amendment. None of these plans are final at this time.

## Scoping

Through media such as public meetings, news advisories and direct mailings, the public was invited to provide the BLM with information about their concerns. Ten scoping meetings were held in eight cities ***within the Lower Gila North and South planning units*** between late February and early April ***1994***. Recreation management was the major concern raised by the public. Chapter 5 provides details of the meetings and the written comments from the scoping period.

Other BLM concerns included land disposal and acquisition, wild horse and burro management, desert tortoise habitat and oil and gas development.

An additional concern was identified by the Arizona Game and Fish Department after the formal scoping process. The Department wants to continue desert bighorn sheep ***reestablishment*** and maintenance throughout the ***planning units***. This concern has been included in the current planning effort.

## Description of the Planning Area

The ***Lower Gila North and South planning units*** encompass approximately two million acres of public lands in Maricopa, Yavapai, Pima, Pinal, La Paz and Yuma counties. An additional 1.1 million acres on the Barry M. Goldwater Air Force Range (hereafter referred to as the Goldwater Range) is also included in the planning area (see Map 1). Nearly four million acres of federal mineral estate are administered by the ***Phoenix Field Office***. The boundaries of the area are the Santa Maria River to the north, west to the Eagletail Mountains, the Mexico border in the south and the eastern boundary of the Papago Indian Reservation ***of the Tohono O'odham Nation***.

The communities of Buckeye, Wickenburg, Gila Bend and Ajo form the population centers within the ***planning units***. Metropolitan Phoenix and the surrounding communities are just east of the ***eastern boundary of the planning units***. The metropolitan area represents the largest concentration of public land users in the region.

Some of the lands covered by the existing land use plans are now outside the ***planning unit*** boundaries. In 1991 ***and 1997***, boundaries of the BLM's Phoenix, Safford and Yuma ***field offices*** were administratively changed to promote more efficient resource management. Several areas previously administered by the ***Phoenix Field Office*** were transferred to the ***Kingman, Lake Havasu*** and Yuma ***field offices***. Responsibility for implementation of land use decisions in the existing plans ***and this amendment*** also transferred to these ***field offices.***

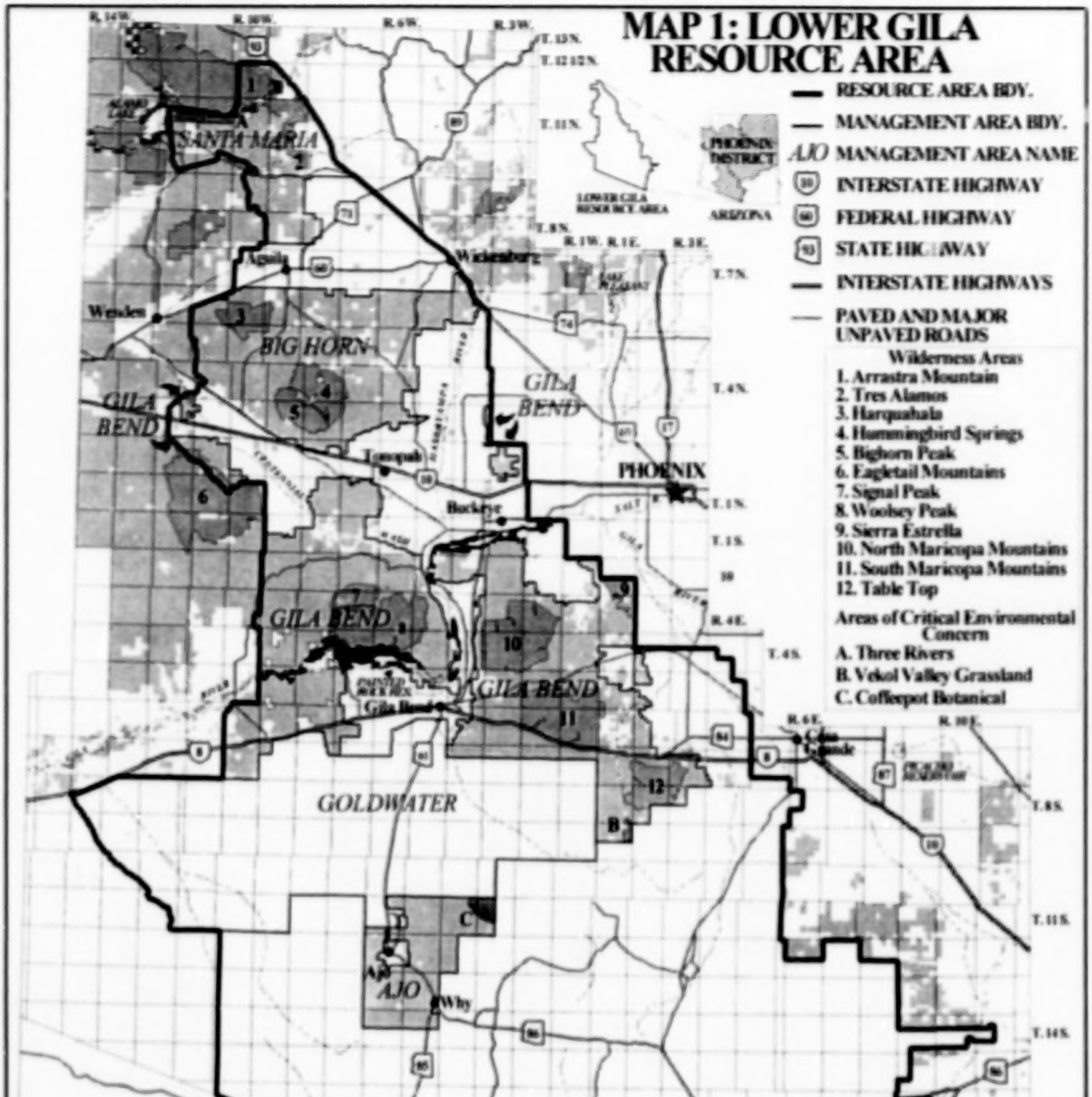
***Off-highway vehicle designations and Recreation Opportunity Spectrum and Visual Resource Management classifications presented in this planning amendment will also address BLM-administered public lands outside the planning area boundaries north, northeast and east of Wickenburg. This area, bordered by State Highway 93 on the west, extends east to the 1997 boundary of the Phoenix Resource Area Resource Management Plan (RMP) planning area and north to the former Kingman Resource Area boundary.***

## Planning Issues

The BLM planning regulations (43 CFR 1600) equate land use planning with problem solving and issue resolution. An issue is defined as an opportunity, conflict or problem regarding the use or management of public lands and resources.

The BLM planning team used internal discussions and the scoping process to identify issues. A total of six internal (BLM-generated) and external (public input) issues were identified. A BLM interdisciplinary team from the ***Phoenix Field Office*** and the Arizona State Office raised developed recreation management as a primary issue. The team also elevated three program areas which required updates to conform to national BLM policy. Review of the lands program to facilitate retention of key resource components currently identified for disposal was the final planning issue from this team.

External issues were developed during scoping. The BLM planning team analyzed public comments



MAP 1: LOWER GILA RESOURCE AREA

and identified two planning issues. Recreation management to provide for long-term camping and off-highway vehicle use was the major external issue. The need for further desert bighorn sheep augmentation and reestablishment was raised by the Arizona Game and Fish Department as the second issue. Proposed augmentation and reestablishment objectives and anticipated distribution need to be identified in the land use plan in accordance with 1992 guidance in BLM Manual 1745 (1992).

The following describes each issue identified for resolution.

**Issue 1: Lands** -- Do public lands, currently identified for disposal, contain key resource components including desert tortoise habitat, wildlife corridors, riparian habitat and cultural resources? If so, should these lands be retained for the public good?

**Issue 2: Desert tortoise habitat** -- What quantity and quality of desert tortoise habitat currently exist? Do these areas require special management provisions for protection to assure that the species does not become listed under the Endangered Species Act? If so, will these provisions restrict or modify certain activities on the public lands?

**Issue 3: Desert bighorn sheep augmentation and reestablishment** -- What is the objective of the program and the anticipated distribution to be achieved by the augmentation and reestablishment activities? Where does the Arizona Game and Fish Department anticipate augmentation or reestablishment activities to take place over the next 10 years?

**Issue 4: Wild horse and burro management** -- What areas currently have zero population prescriptions or herd numbers set without benefit of habitat monitoring data? Will revised management prescriptions restrict or modify certain uses of public lands?

**Issue 5: Recreation management** -- What areas should be designated as open, closed or limited (see Glossary) for off-highway vehicle use? Which public lands should be designated special recreation management areas and be managed to maintain and enhance their characteristic outdoor recreation opportunities and the natural settings on which these opportunities are based? What recreational settings should be maintained for the identified recreational opportunities occurring within the extensive recreation management areas? What management prescriptions for developed recreation, including camping facilities and stay limits, are needed to provide for resource protection, long-term visitors and local use? What management prescriptions are needed to provide for special recreation uses in response to public demand?

**Issue 6: Oil and Gas Development** -- What level of exploration and development is anticipated in the ***planning units*** over the next 10 years?

# Planning Criteria

Planning criteria are the standards, rules and measures used to guide data collection and alternative formulation. These criteria guide final plan selection. Planning criteria are taken from laws and regulations, BLM manuals and directives and concerns expressed in meetings and in consultations with the public, tribes and other agencies.

In addition to the basic criteria listed in Section 202 of the Federal Land Policy and Management Act, changes in current resource management practices were considered for any of the following conditions.

-- Management of one resource significantly constrains or curtails use of another resource.
-- Existing land use allocations conflict with agency resource management policies or guidance.
-- Existing resource management practices conflict with management plans, policies and guidance of another federal or state surface management agency or tribe.
-- Documented public controversy regarding management of a specific resource value.

# Chapter 2 -- The No Action and Proposed Action Alternatives

## No Action -- Current Guidance

### Land tenure adjustments

All disposal and acquisition decisions identified in the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan are brought forward in this alternative. All lands not previously identified for disposal shall be retained in public ownership. These lands would continue to be managed under the principles of multiple use management and, in certain areas, under the wilderness management regulations.

***Based on*** existing land use plans, approximately 62,260 acres ***are identified*** for disposal (see Map 2) and 10,735 acres of state land ***are identified*** for acquisition, all within the ***Lower Gila North and South planning units.*** Only the Lower Gila South plan identified lands for acquisition. They were selected because of their potential for containing high natural resource values such as wildlife habitat and riparian habitat. Lands recommended for disposal will be retained if significant resource values are located during the environmental assessment process. ***On a case-by-case basis, the BLM will continue to dispose of federal subsurface estate under nonfederal surface estate and acquire nonfederal subsurface estate under federal surface estate***.

Disposals must meet the criteria in sections 203 and 206 of the Federal Land Policy and Management Act as amended by the Federal Land Exchange Facilitation Act for sales and exchanges. As in the proposed action, exchange will be the preferred method of disposal. Other forms of disposal such as the Recreation and Public Purpose Act would also be considered for retention lands on a case-by-case basis. Under this act, the BLM has the authority to lease or convey, at less than fair market value, public lands to governmental and nonprofit entities for public purposes such as recreation sites, building sites, schools, prisons and other facilities.

All exchanges are voluntary transactions between the BLM and the nonfederal party and are discretionary. They also must be in the public interest, of equal fair market value and consistent with the Federal Land Policy and Management Act.

### Desert tortoise habitat management

BLM Manual 6840.06(c) requires that habitats of federal candidate species -- ***former U.S. Fish and Wildlife Service candidate species, now being considered as a BLM sensitive species*** -- be managed and conserved to ensure that BLM actions do not contribute to the need to list those species as threatened or endangered.

In addition to the land use decisions, the BLM has developed national and state-wide guidance on management of desert tortoise habitat. This guidance is found in *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan* (BLM 1988) and *Strategy For Desert Tortoise Habitat Management On Public Lands In Arizona* (BLM 1990).

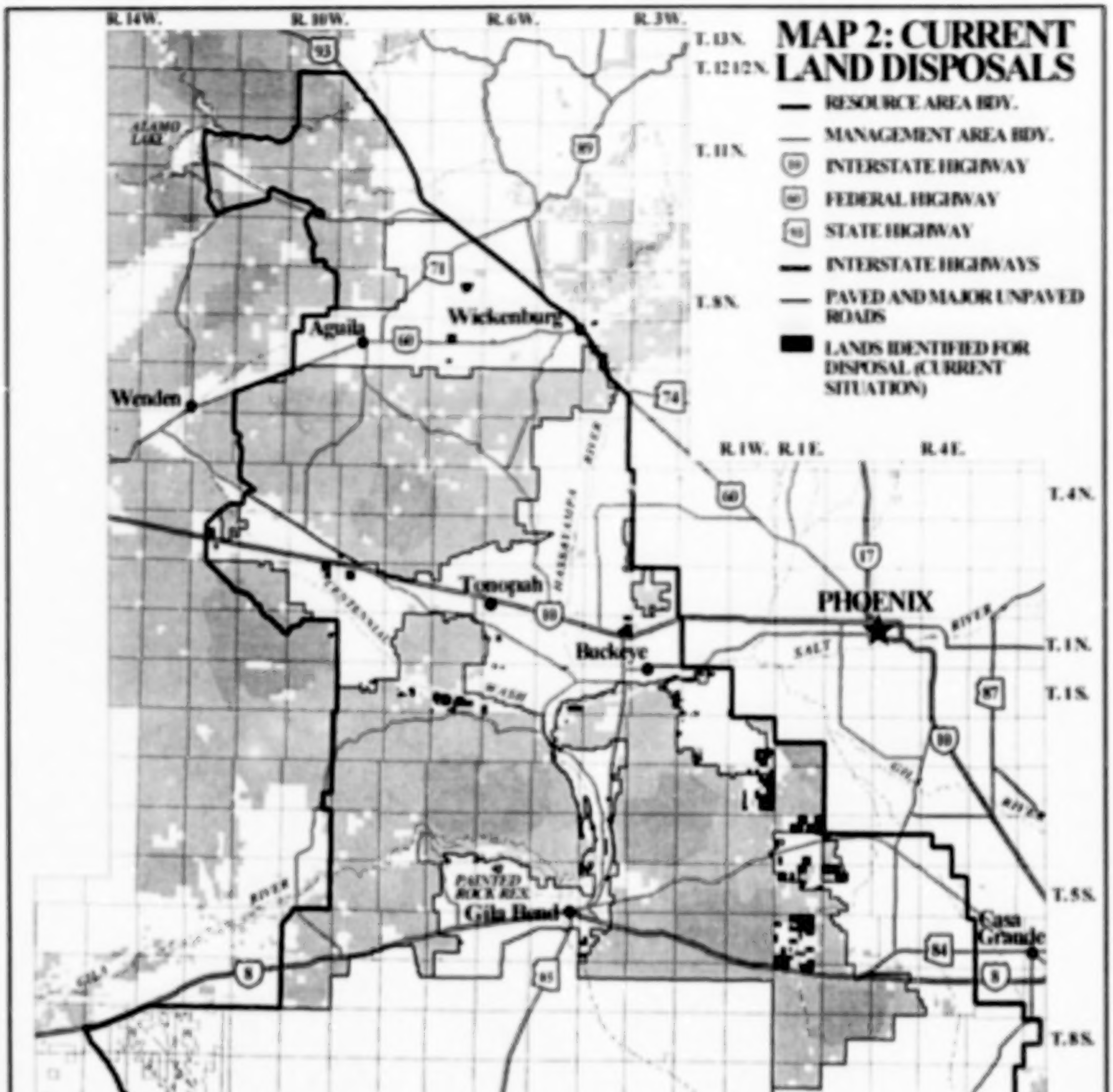
### Desert bighorn sheep augmentation and reestablishment

The Lower Gila North Management Framework Plan proposed desert bighorn sheep ***reestablishment*** into the Black Mountains. ***Augmentation decisions for the Lower Gila North and South planning units are made on a case-by-case basis.***

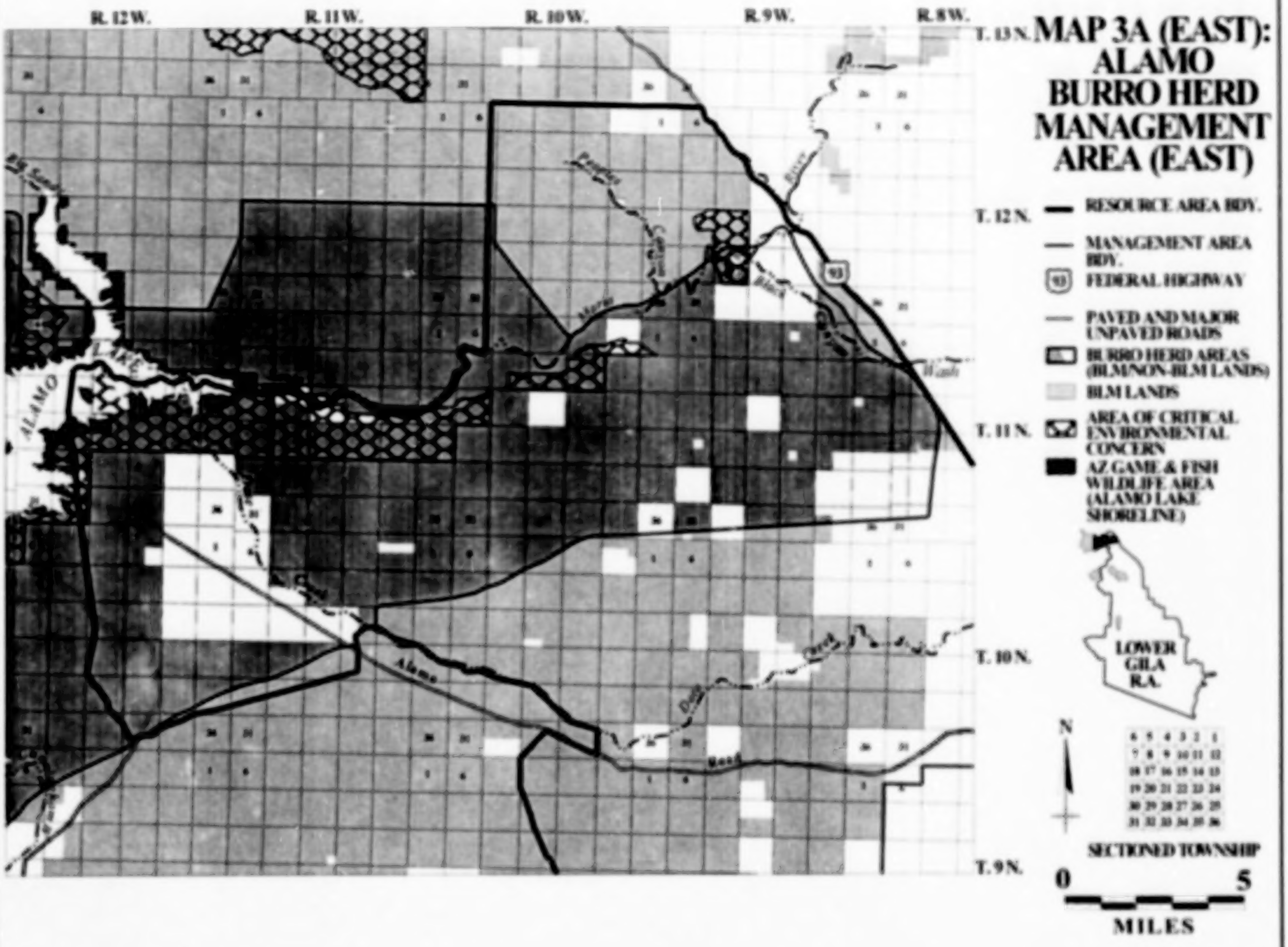
### Wild horse and burro management

The Wild and Free-Roaming Horse and Burro Act of 1971 and 43 CFR 4710.4 provide that the management of wild horses and burros be undertaken with the objective of limiting the animals' distribution to herd areas. A herd area is the geographic area identified as having been used by a herd as its habitat in 1971 ***(see maps 3A through 3D)***. A herd management area is a herd area or any portion thereof identified for maintenance and management of wild horses or burros through decisions resulting from the land use planning process, including public involvement.

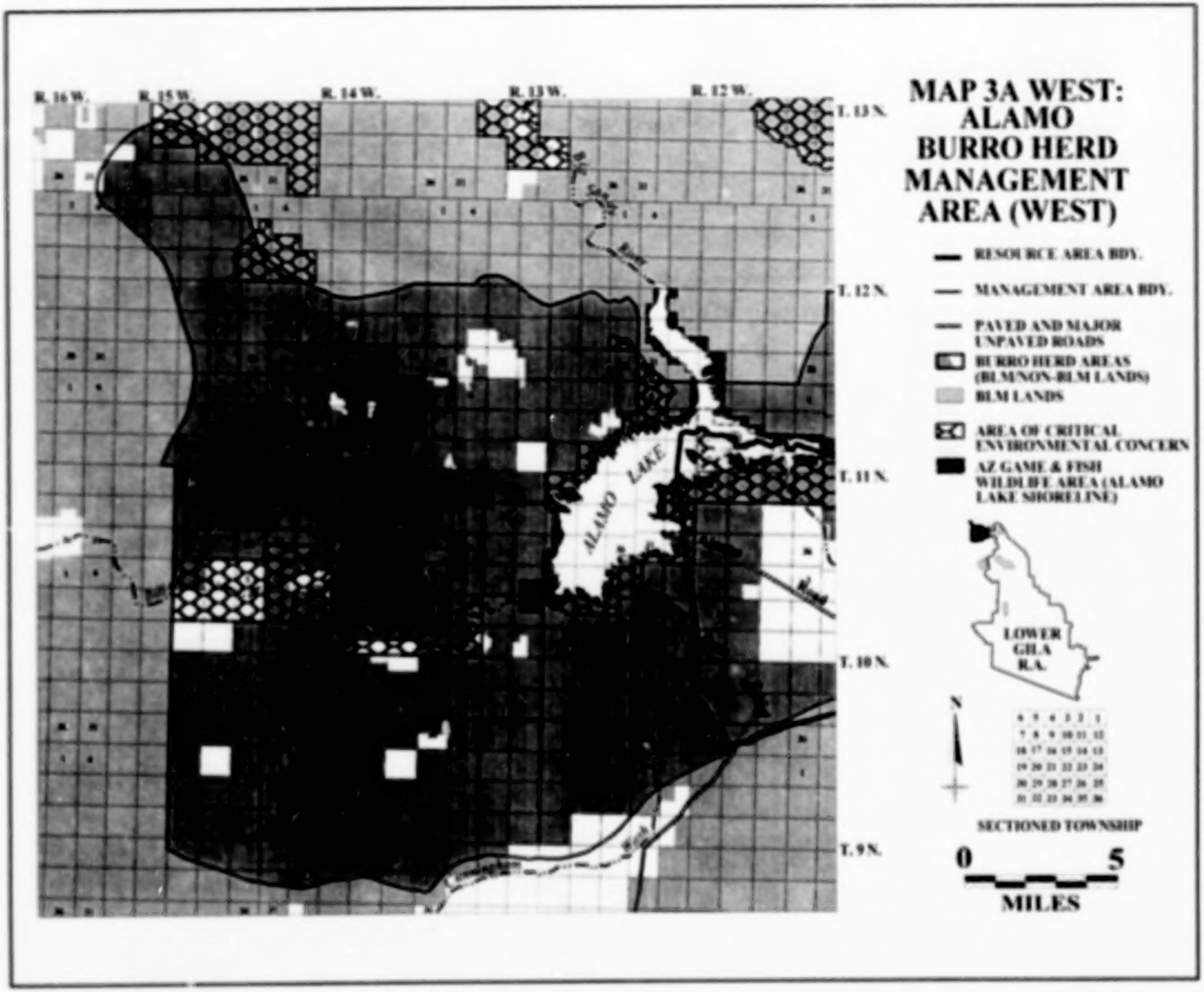
***An Interior Board of Land Appeals decision rendered in 1989 reaffirmed the BLM's mandate to manage burros in designated herd areas as free-roaming, self-sustaining populations which contain the optimum number of burros in a thriving natural ecological balance. The BLM can only remove***



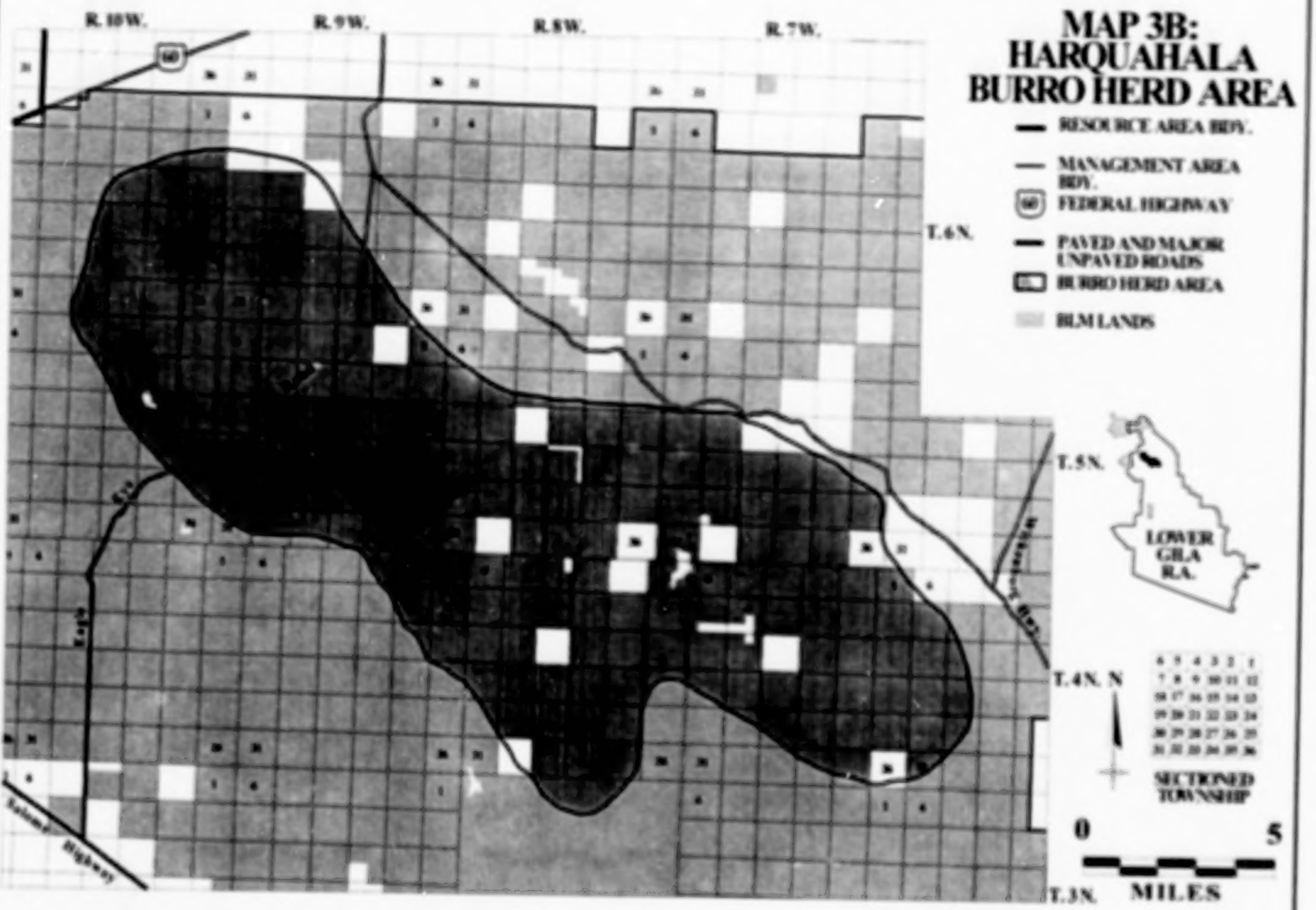
MAP 2: CURRENT LAND DISPOSALS



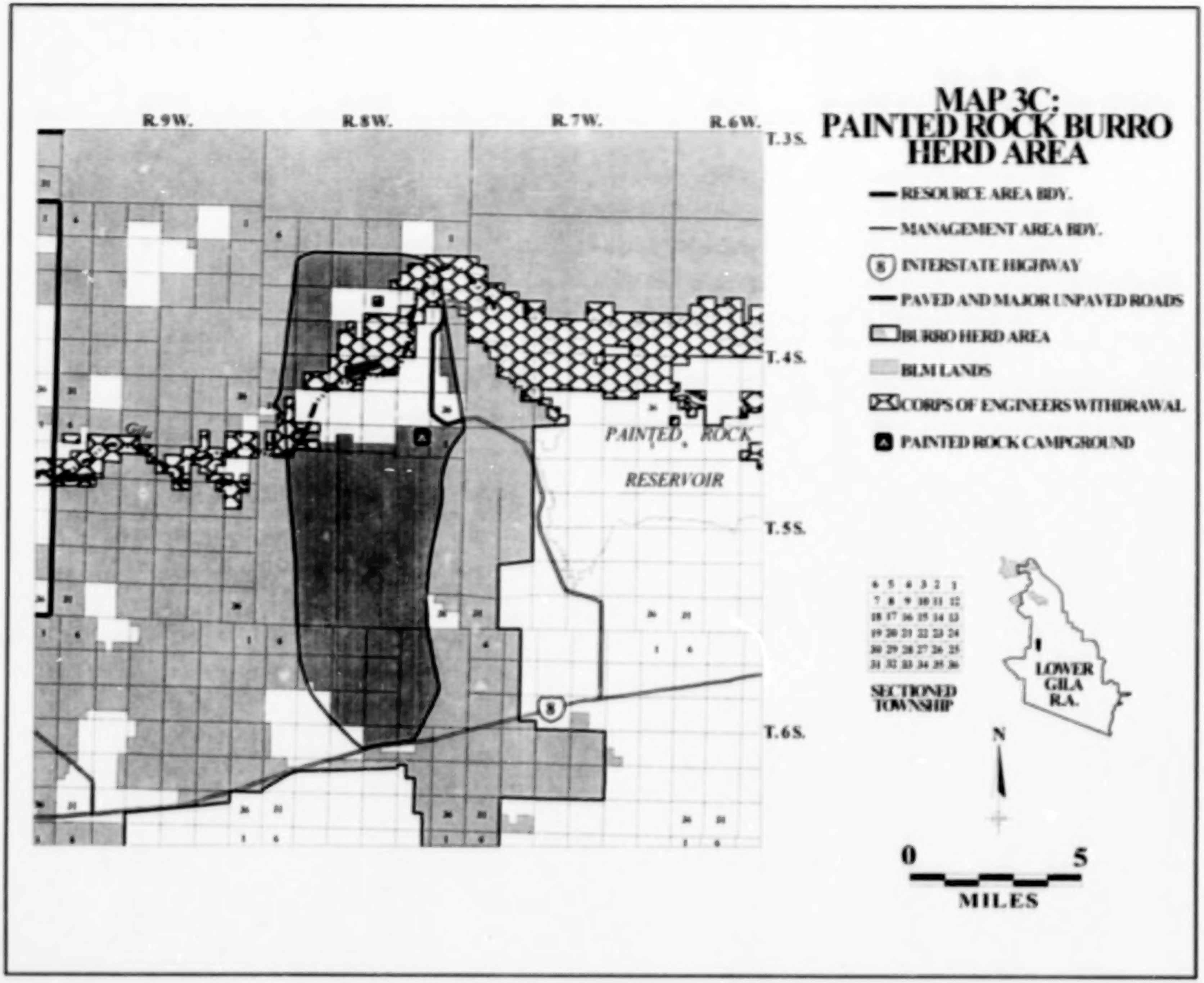
# MAP 3A (EAST): ALAMO BURRO HERD MANAGEMENT AREA (EAST)



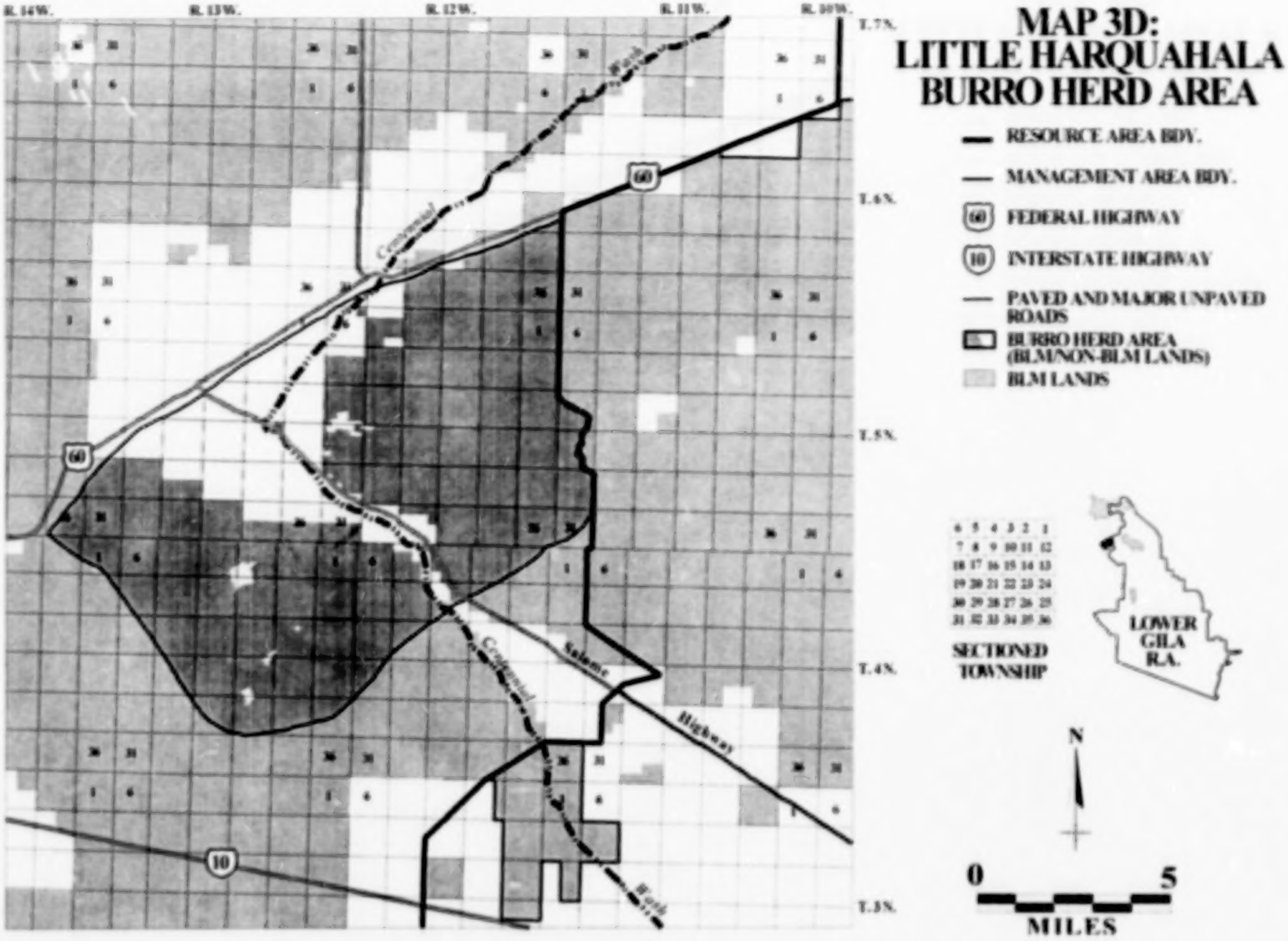
# MAP 3A WEST: ALAMO BURRO HERD MANAGEMENT AREA (WEST)


MAP 3B:
HARQUAHALA
BURRO HERD AREA
RESOURCE AREA BDY.
MANAGEMENT AREA BDY.
FEDERAL HIGHWAY
PAVED AND MAJOR UNPAVED ROADS
BURRO HERD AREA
BLM LANDS
R. 10W.
R. 9W.
R. 8W.
R. 7W.
T. 6 N.
T. 5 N.
T. 4 N.
T. 3 N.
60
Eagle Eye
Salome Highway
Wickenburg Hwy.
LOWER GILA R.A.
N
SECTIONED TOWNSHIP
0
5
MILES

# MAP 3C: PAINTED ROCK BURRO HERD AREA



# MAP 3D: LITTLE HARQUAHALA BURRO HERD AREA



***burros which exceed the thriving natural ecological balance.***

The Harquahala and Painted Rock herd areas are within the ***Phoenix Field Office area.*** The Alamo Herd Management Area ***is in the Kingman and Lake Havasu field office areas***. The Little Harquahala Herd Area is entirely within the ***Yuma Field Office*** area.

***The Alamo Herd Management Area contains the Alamo Wildlife Area, which, except for livestock grazing, wild burros and wilderness, is withdrawn to the Corps of Engineers. The Corps has licensed the wildlife area to the Arizona Game and Fish Department, which has wildlife and wildlife habitat management responsibility.***

***Valid existing decisions for the Alamo Herd Management Area are***:

-- managing the population for color diversity,
-- maintaining free access to livestock watering facilities,
-- maintaining wild burro access to Alamo Lake,
-- identifying a burro viewing area with interpretive signs and
-- limiting or modifying structures which would inhibit burro movement.

***Burros in the herd areas and herd management area are*** managed as ***free-roaming*** self-sustaining populations which contain the optimum number of wild burros in a thriving natural ecological balance with other ***multiple-use resource*** components***, as determined through a manageability determination and monitoring, research and analysis of resource use.***

***All herd management area activities would be at the minimal feasible level and carried out in consultation with the Arizona Game and Fish Department and other interested parties. This would protect the natural ecological balance with all wildlife species which inhabit the herd areas and the herd management area, particularly threatened or endangered species. Any adjustments in forage allocations in the herd management areas would take into consideration the needs of other wildlife species.***

***That portion of the wild burro population that exceeds the thriving natural ecological balance in designated herd areas and the herd management area shall be identified as excess, humanely captured and removed from public lands.***

***Wild burros outside of these areas will be considered excess animals and removed through a live capture program. Healthy excess wild burros shall be made available at adoption centers for private maintenance and care. The BLM shall protect wild burros from unauthorized capture, branding, harassment and destruction.***

***Goldwater Range -- There are no unclaimed wild and free-roaming burros on the Goldwater Range. However, domestic burros often stray from the Tohono O'odham Nation onto the Goldwater Range.***

## Recreation Management

The 14-day camping stay limit will remain in force for all lands within the ***planning units. This applies to all public lands in the Lower Gila North and South planning units and those lands transferred to the Yuma Field Office established by Federal Register Notice (Vol. 54, No. 215, November 8, 1989).*** Visitors will be allowed to camp for up to 14 days at any given location not closed to camping by the authorized officer. ***Areas may be closed for resource protection, rehabilitation or to reduce conflicts with other uses. Other regulations and conditions for the 14-day stay limit may be identified by the authorized officer.***

The ***planning units*** will retain current off-highway vehicle designations. Lower Gila North will remain undesignated except for wilderness closures; Lower Gila South will remain designated as limited to existing ***and/or designated*** roads, trails and vehicle routes. ***The Goldwater Range will remain limited to designated routes in areas of critical environmental concern and established routes elsewhere and will continue to require an entry permit*** (see Map 4).

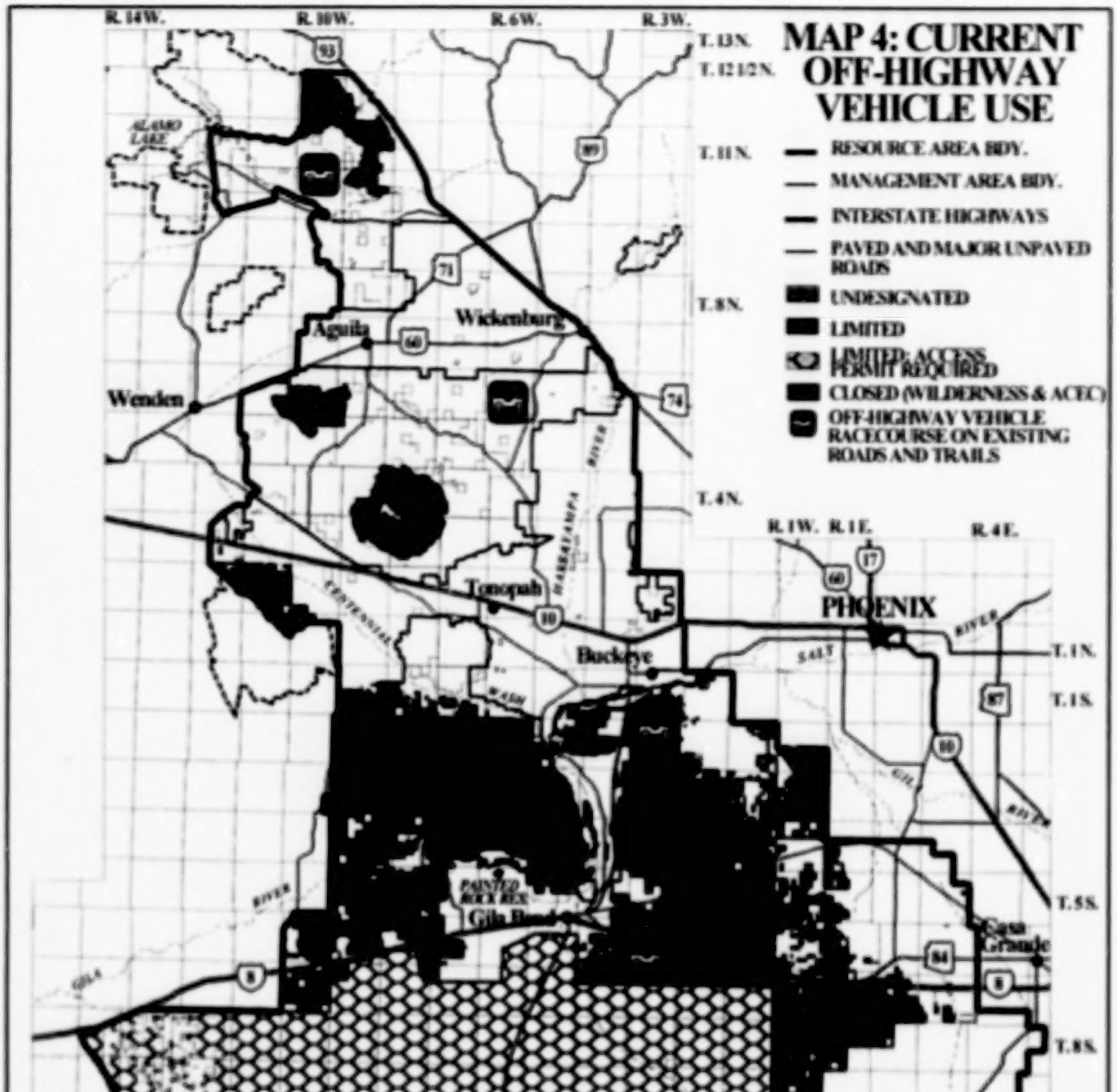
Off-highway vehicle racing in the ***Lower Gila North and South planning units*** will be permitted on a case-by-case basis. Race courses will be developed by the promoter/permittee using existing roads and trails.

***Visual Resource Management classes will not be refined during ongoing interdisciplinary plans. Wildernesses in Lower Gila North will retain the current Visual Resource Management classifications.***

The ***Phoenix Field Office*** will not develop new recreation facilities. Existing facilities will be managed by contract, recreation and public purposes lease/patent or third party agreement.

## Oil and Gas Development

Mineral exploration and development are generally encouraged on public lands in keeping with the BLM's Mineral Resources Policy of May 29, 1984, the Mining



MAP 4: CURRENT OFF-HIGHWAY VEHICLE USE

and Minerals Policy Act of 1970 and the Federal Land Policy and Management Act. All operators shall comply with applicable federal and state pollution control standards.

The Mineral Leasing Act of 1920 and 43 CFR 3100 provide the regulatory framework for issuing oil and gas leases. The Supplemental Program Guidance for Energy and Mineral Resources (BLM Manual 1624) provides additional guidance for resource management planning. These regulations apply where public interest exists for exploration and development of oil and gas resources.

Under this alternative, public requests for oil and gas exploration or development leases would be handled on a case-by-case basis and require a plan amendment for each request.

Approximately 375,000 acres of federal minerals in wildernesses are closed to oil and gas leasing. The Goldwater Range, Painted Rock Reservoir and Alamo Lake are withdrawn from mineral entry. The approximately 1.6 million acres of federal minerals remaining in the planning area are open to oil and gas leasing.

# Proposed Action

***This alternative includes proposals that would modify the decisions identified in the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan (see Table 1).***

BLM staff have identified ***five*** units of well-blocked public lands in the ***Lower Gila North and South planning units***, each having unique resource issues and opportunities. From north to south, the Santa Maria, Big Horn, Gila Bend, Goldwater Range and Ajo management areas are named for unique features or local population centers. The ***isolated*** public lands interspersed with private or state lands ***outside of manegement areas form the remaining lands*** (see Map 1).

## Land Tenure djustments

### Disposals (sale or exchange)

Approximately ***34,100*** acres of public lands within the ***planning units*** have been identified for disposal (***see maps*** 5 north, central and south). ***Appendix A is a noninclusive listing of federal lands within the disposal areas, e.g., some very small parcels of land were not listed.*** Most of these lands are isolated parcels outside the boundaries of the management areas. Some of these parcels are well suited for agriculture, community expansion or management by private or state entities. ***A few parcels within the management areas are being disposed of to resolve occupancy and trespass issues.***

***Public lands in the Gila Bend Management Area adjacent to the White Tanks County Regional Park described as T. 2 N., R. 3 W.,*** secs. ***4, 5, 8, 9, 14, 15, 17 through 22, 26 through 29 and 33 through 35, T. 2 N., R. 4 W.,*** sec. ***1 and T. 3 N., R. 4 W.,*** secs. ***1, 11 through 14, 24, 25 and 36 will be retained in federal ownership and will only be available for disposal to local or state governmental entities for recreation/park purposes.***

***The BLM will continue to dispose of federal subsurface estate under nonfederal surface estate on a case-by-case basis.***

***Exchanges to reposition lands within all the management areas may occur if it has been determined that it would be in the public interest.*** All disposals meet the criteria for sales and exchanges set forth in sections 203 and 206 of the Federal Land Policy and Management Act as amended by the Federal Land Exchange Facilitation Act.

Lands identified for disposal may be retained if significant resource values are found during evaluation. ***The policy is not to dispose of lands occupied by proposed or listed threatened or endangered species. If other public uses outweigh the value of a parcel as federal-owned threatened or endangered species habitat, disposal could be considered on a case-by-case basis. If a listed or proposed threatened or endangered species would be affected by a land disposal action, consultation or conferencing with the U.S. Fish and Wildlife Service will be required. Exchange for other parcels of habitat would be encouraged.*** Compensation for loss of habitat value would be required where such a policy exists. Other mitigation may also be required. These determinations would be made during preparation of the site-specific environmental assessments required for every disposal action. Environmental documentation must be in compliance with the National Environmental Policy Act prior to the approval of any lands action.

All lands in Appendix A meet two of the three criteria identified in the Federal Land Policy and Management Act for sale. The two criteria met are:

-- ". . . *such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency*"

*or*

-- "*disposal of such tract will serve important public objectives, including but not limited to, expansion*

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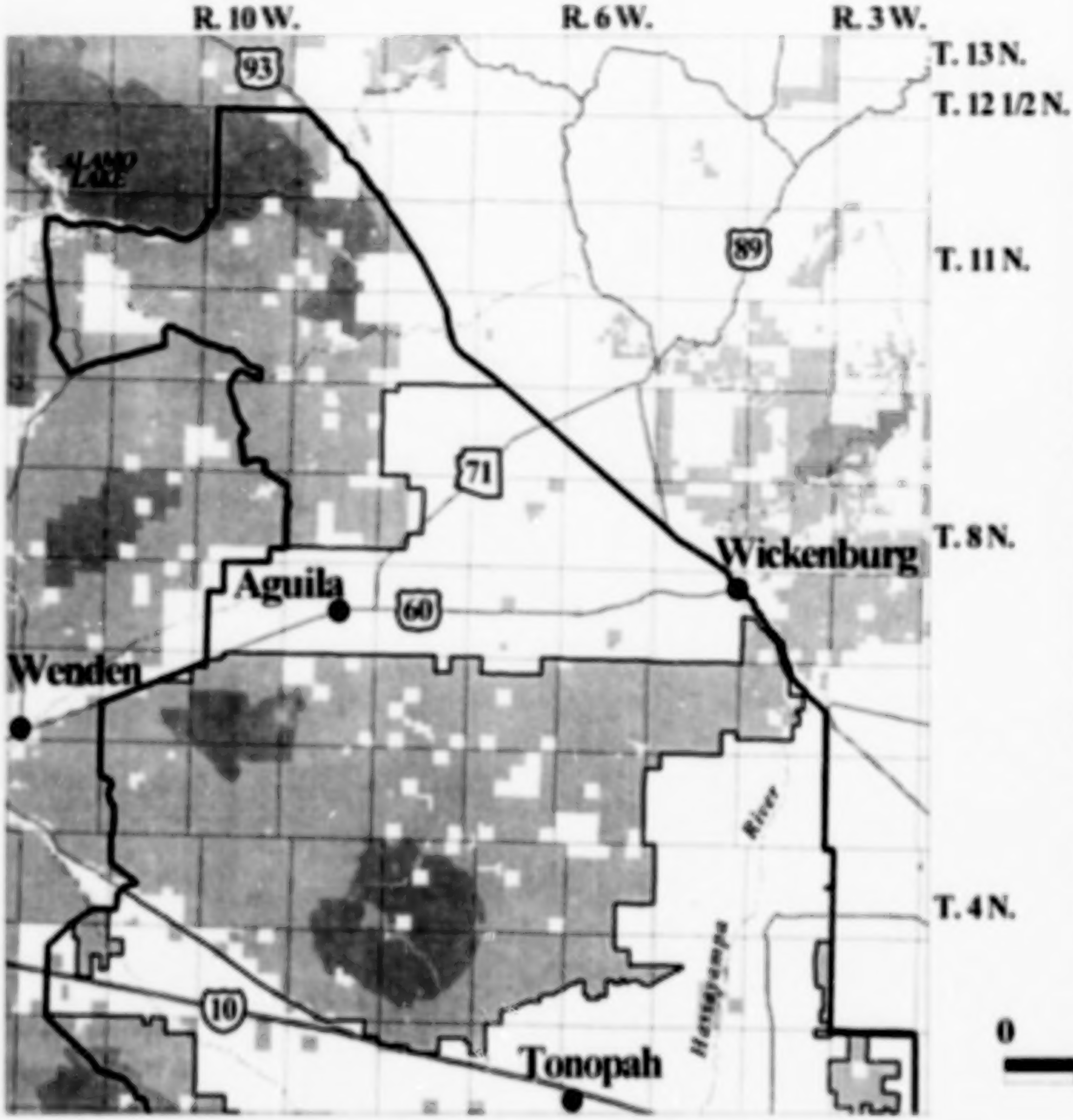


# MAP 5 NORTH: SANTA MARIA, BIG HORN. PROPOSED LAND DISPOSAL AND ACQUISITION*

Lands outside the management area are eligible for disposal; lands inside are eligible for acquisition.

*All transfers would be on a willing-seller/ willing-buyer basis.

▬ RESOURCE AREA BDY.

— MANAGEMENT AREA BDY.

▨ BLM

▩ WILDERNESS

Parcels ten acres or smaller may not appear.

N

| | | | | | |
|---|---|---|---|---|---|
| 6 | 5 | 4 | 3 | 2 | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 |
| 18 | 17 | 16 | 15 | 14 | 13 |
| 19 | 20 | 21 | 22 | 23 | 24 |
| 30 | 29 | 28 | 27 | 26 | 25 |
| 31 | 32 | 33 | 34 | 35 | 36 |

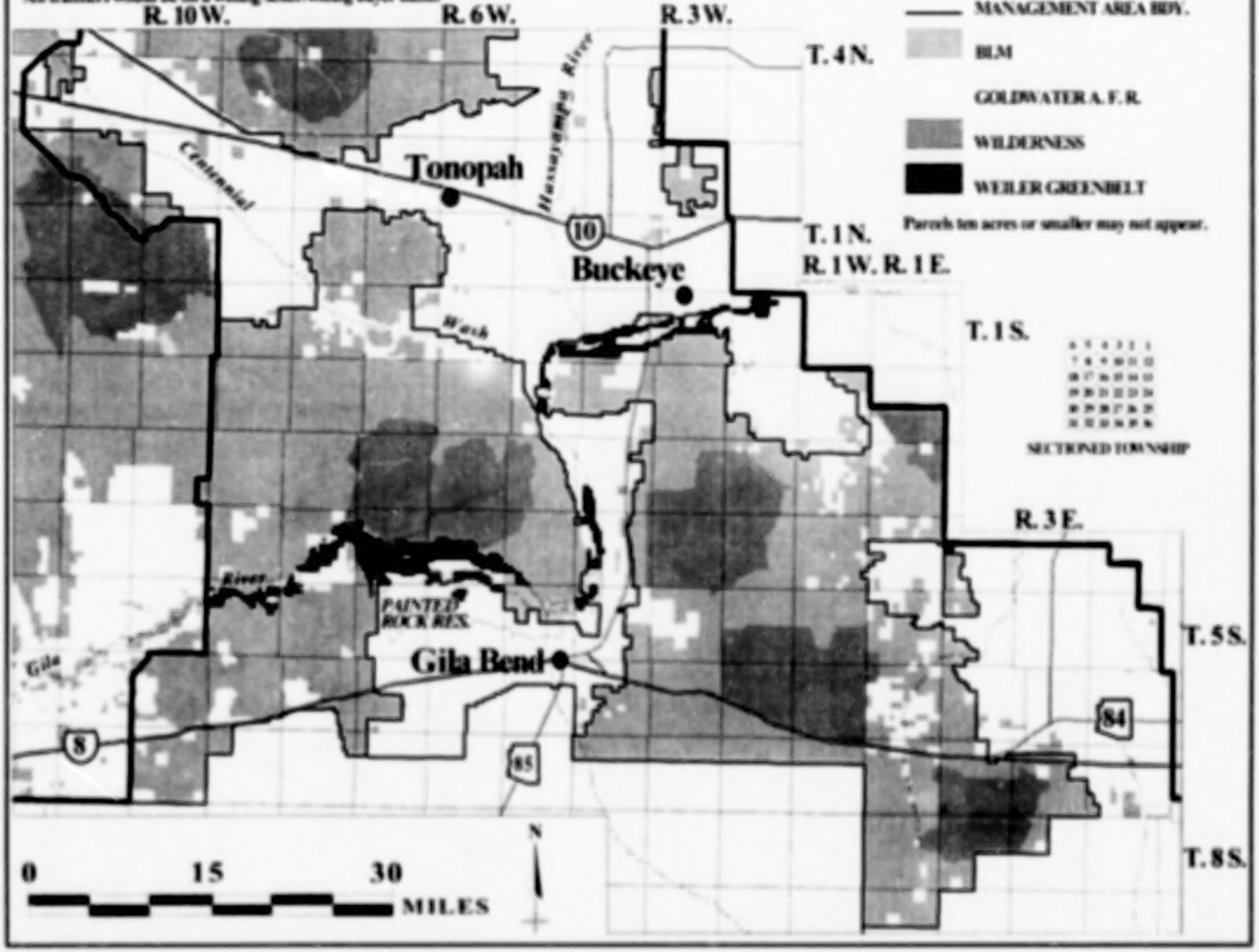
SECTIONED TOWNSHIP

0 15 30

## MAP 5 CENTRAL: GILA BEND. PROPOSED LAND DISPOSAL AND ACQUISITION*

Lands outside the management area are eligible for disposal; lands inside are eligible for acquisition.

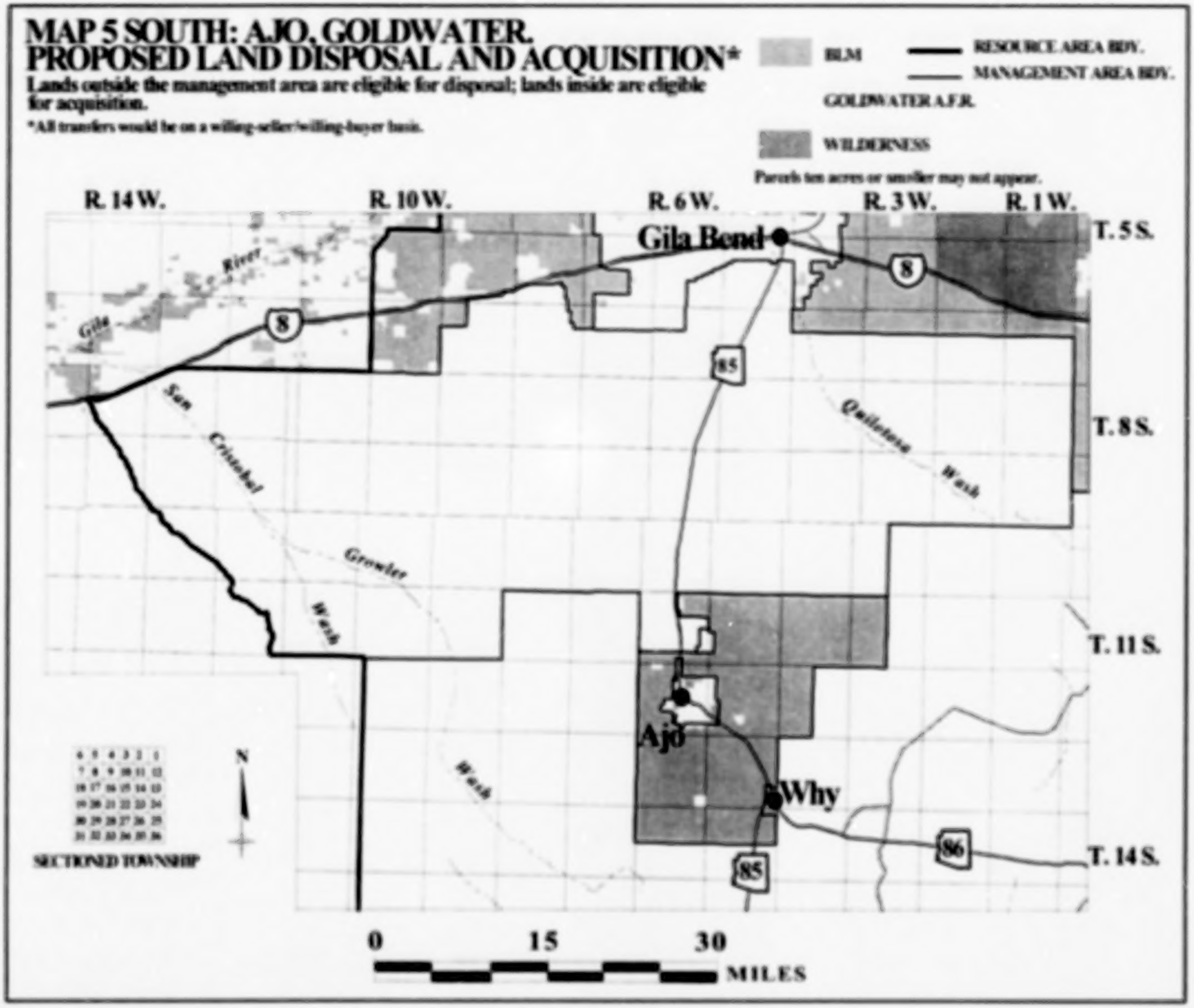
*All transfers would be on a willing-seller/willing-buyer basis.



# MAP 5 SOUTH: AJO, GOLDWATER. PROPOSED LAND DISPOSAL AND ACQUISITION*

**Lands outside the management area are eligible for disposal; lands inside are eligible for acquisition.**

*All transfers would be on a willing-seller/willing-buyer basis.



*of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including but not limited to, recreation and scenic values, which would be served by maintaining such tract in Federal ownership."*

Although these lands qualify for sale, ***the Arizona BLM preferred methods of disposal are exchange or lease or conveyance to local governments or nonprofit organizations under the Recreation and Public Purposes Act.***

All exchanges and sales will be based on fair market value as determined by procedures consistent with 43 CFR 2200 and 2700. All exchanges are voluntary transactions between the BLM and the nonfederal party and are discretionary. The BLM or an approved contract appraiser will appraise the lands and interests in the lands to be disposed of and acquired as part of sales or exchanges.

***Approximately 3,043,900*** acres not listed in ***Appendix A or identified for specific purposes in this alternative*** will be retained in public ownership unless needed for recreation or public purposes. Such disposal proposals on lands not identified for disposal will be considered on a case-by-case basis.

Wildernesses and the Goldwater Range lands are withdrawn from all forms of appropriation under the public lands laws and are not available for disposal.

**Acquisitions**

Lands to be acquired will normally have high public and natural resource values that will complement existing and proposed management programs and will consolidate ownership patterns to improve management efficiency (see maps 5 north, central and south). All nonfederal lands with high resource values within the boundaries of the management areas may be considered for acquisition in this land use plan. Acquisitions will occur primarily through the land exchange process in accordance with 43 CFR 2200 and the Federal Land Exchange Facilitation Act. Acquisition by donation and purchase using Land and Water Conservation Funds will also be considered when willing parties or available funds exist. All acquisitions will be negotiated with willing landowners only and must be in the public interest. ***There are approximately 288,800 acres of nonfederal land within the five management areas.***

***The BLM will continue to acquire nonfederal subsurface estate under federal surface estate on a case-by-case basis.***

## Desert Tortoise Habitat Management

The ***Phoenix Field Office*** proposes to standardize desert tortoise habitat management ***throughout the Lower Gila North and South planning units.*** This management will be consistent with *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan* (BLM 1988) and *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona* (BLM 1990).

The objectives outlined in *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona* (BLM 1990) are tailored to Arizona's needs. Each statewide objective is listed below with the ***field office*** management actions to accomplish the objective.

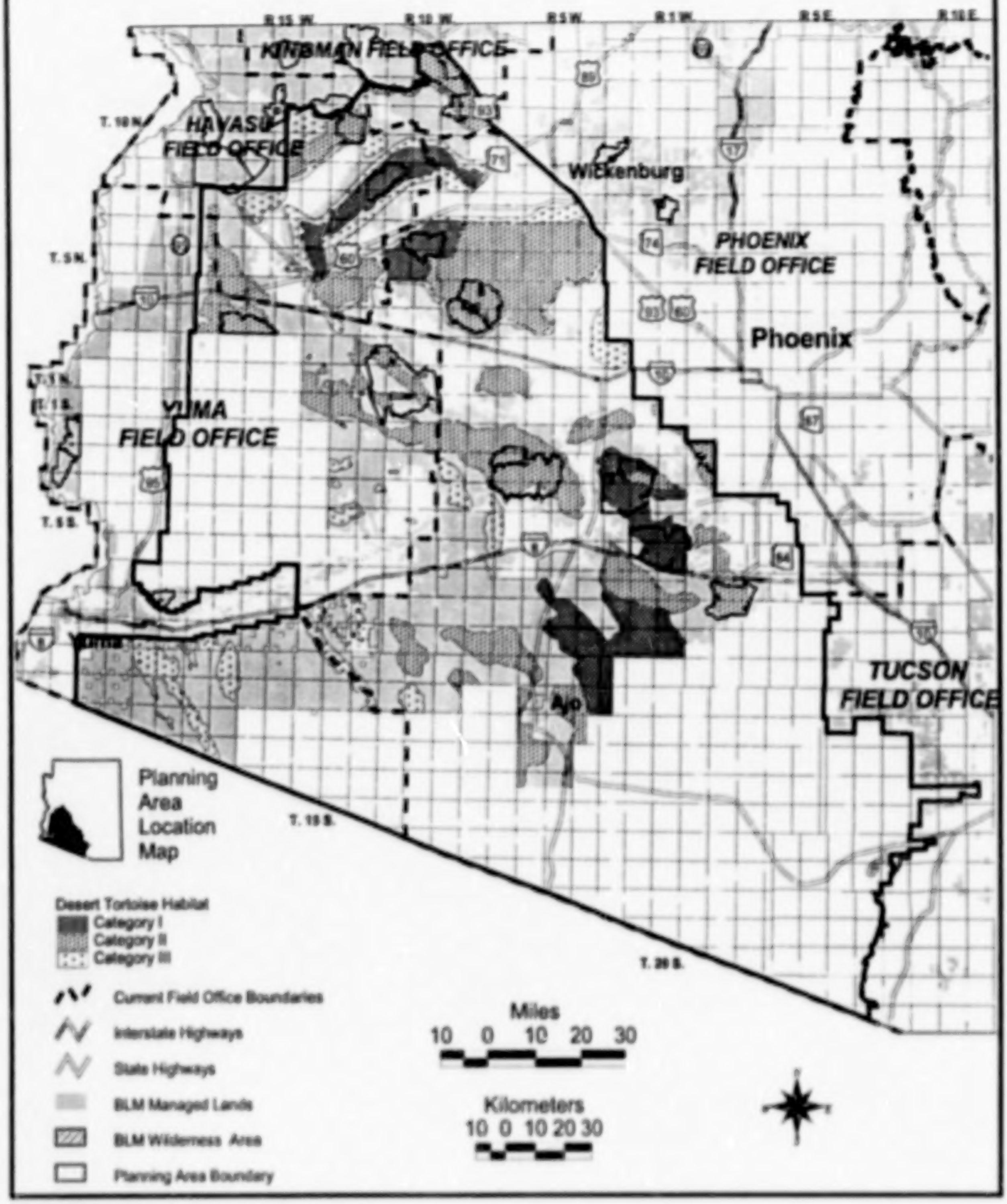
- Develop an overall public education program concerning tortoise populations and habitats.

> ***Phoenix Field Office*** personnel will participate, when asked and when appropriate, in public events such as fairs and open houses with information and displays showing the management of public lands including desert tortoise habitat. ***Phoenix Field Office*** will develop a public brochure on desert tortoise.

- Complete and maintain a continuing inventory and monitoring program for tortoise populations and habitats to assist in making management decisions, including habitat categorization, on public lands. The BLM's desert tortoise inventory and monitoring handbook will contain the standards for inventory and monitoring in Arizona.

> The ***planning units*** have been inventoried for desert tortoise habitat and habitat categories ***(see Appendix B)*** have been established (see Map 6). These boundaries may be slightly altered as new and better information becomes available on population distributions and dynamics.
>
> There are three established one-square-mile study plots to monitor desert tortoise populations and habitat, one each in the Maricopa, Harcuvar and Harquahala mountains. All one-square-mile plots will be re-read every five years.
>
> The ***Phoenix Field Office*** will maintain ***records*** of environmental assessments containing

# MAP 6: DESERT TORTOISE HABITAT CATEGORIES



stipulations pertaining to the desert tortoise for the express purpose of tracking compliance and effectiveness of the stipulations.

- Develop and maintain a monitoring program specifically for land use activities that adversely affect tortoise habitats for use in analyzing and responding to the cumulative impacts of land use decisions on tortoise habitats.

The ***Phoenix Field Office*** will provide the Arizona State Office ***with*** an annual summary of the environmental ***assessment for*** actions in desert tortoise habitats.

- ***Comply fully with the Endangered Species Act of 1973,*** as amended, as it relates to tortoise population and habitat management on public lands.

The ***Phoenix Field Office*** will comply with Section 2 of the Endangered Species Act and BLM policy for managing habitat of candidate species -- ***former U.S. Fish and Wildlife Service candidate species, now being considered as a BLM sensitive species*** -- to assure that ***the Sonoran*** population of the desert tortoise does not become threatened or endangered through BLM actions.

- Coordinate and cooperate with other federal and state agencies and other publics concerning tortoise populations and habitat management.

The ***Phoenix Field Office*** has and will continue to work with, share information and support to the extent possible, the interests and work of other agencies and publics.

- Conduct research and studies sufficient to develop and document the knowledge and techniques needed to ensure the viability of tortoise populations and habitats in perpetuity.

The ***Phoenix Field Office will forward research proposals to the*** Desert Tortoise Management Oversight Group.

- Manage the public lands on a continuing basis to protect the scientific, ecological and environmental quality of tortoise habitats consistent with the goals and objectives of the rangewide plan. This implies management capability to sustain a population of sufficient size and resilience to withstand the most severe environmental disturbances and with appropriate sex/age ratios and recruitment rates to maintain viable populations in perpetuity.

The ***Phoenix Field Office has established*** management areas to facilitate management ***and proposes to use management area boundaries to designate disposal and acquisition areas. This will help to protect*** existing corridors and connections and ***provide*** units for which ecosystem management principles can be applied.

The goals and objectives of *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan* (BLM 1988) and *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona* (BLM 1990) will be addressed and incorporated into land management planning through this section of the plan amendment. Specific and quantifiable desert tortoise management objectives for categorized habitat will be included at the ***interdisciplinary*** planning level.

***Phoenix Field Office*** environmental decision documents for all actions occurring in desert tortoise habitat will address and include mitigation measures sufficient to offset, to the extent possible, any loss of tortoise habitat quantity or quality in category I, II and III habitats.

- When the need is identified through the BLM planning system, acquire and/or consolidate, under BLM administration, management units with high tortoise habitat values. When public land tortoise habitat values will be affected by the issuance of a lease, permit, right-of-way or other land use authorization, mitigate to minimize loss of those values.

All ***category I, II and III*** desert tortoise habitat in the ***planning units*** is contained within the proposed management areas, ***with the exception of approximately 1,700 acres of isolated parcels.*** The ***Phoenix Field Office*** proposes to retain public lands within the management areas and to also consolidate lands on a ***willing parties*** basis within them.

Grant new land uses in ***category I, II and III*** tortoise habitats only if no reasonable alternative exists. If no alternative exists, mitigation, including compensation, will be evaluated to meet the no net loss goal.

- Ensure that off-highway vehicle use in desert tortoise habitats is consistent with the category goals, objectives and management actions of the rangewide plan and the Arizona Implementation Strategy.

As part of the proposed action for recreation, off-highway and ***special recreation vehicle*** travel will be designated "limited" throughout the ***Lower Gila North and South planning units*** with no "open" designations planned.

Existing off-highway vehicle race courses that have been run in recent years have been evaluated through the National Environmental Policy Act process and tortoise mitigation has been stipulated. ***Any competitive off-highway vehicle race course proposed in Category I desert tortoise habitat will be prohibited. Efforts will be made to not locate competitive race courses in Category II desert tortoise habitat. Any competitive race course proposed in Category II desert tortoise habitat will be considered only if no reasonable alternative site exists; however, if such relocation is not feasible, impacts will be fully mitigated. Any competitive race course proposed in Category III desert tortoise habitat will be evaluated and impacts will be mitigated***.

- Ensure that livestock use is consistent with the category goals, objectives and management actions of the rangewide plan and the strategy plan. This may include limiting, precluding or deferring livestock use as documented in activity plans or other site-specific plans.

The ***Phoenix Field Office*** internal interdisciplinary team will review categorized desert tortoise habitat in relation to ongoing livestock use on public lands in the ***planning units.*** The team will consider the forage needs of desert tortoise and the ecological site potential in determining and prioritizing efforts to resolve conflicts.

The current ***Phoenix Field Office*** and Arizona State Office ephemeral grazing policies are consistent with the Arizona Strategy Plan.

In category I and II desert tortoise habitat, the ***Phoenix Field Office*** will allow only those range improvements for livestock that will not conflict with desert tortoise habitats or populations.

***Proposed actions will undergo an environmental analysis to determine appropriate mitigation.***

- Manage wild horses and burros in a manner consistent with the category goals, objectives and management action of the rangewide plan and the Arizona Implementation Strategy. This may include limiting or precluding wild horse and/or burro use.

The ***Phoenix Field Office is mandated*** to manage wild burros in a thriving ***natural*** ecological balance ***with other multiple-use resource components***. This would preclude burro management that would adversely impact desert tortoise habitat or populations.

- Manage other wildlife on public lands consistent with the goals, objectives and management actions of the rangewide plan and the Arizona Strategy Plan.

The ***Phoenix Field Office will coordinate the reestablishment and augmentation of desert bighorn sheep with the Arizona Game and Fish Department on a case-by-case basis.***

The ***Phoenix Field Office*** will allow only those new wildlife improvements, in category I and II desert tortoise habitats, that do not conflict with desert tortoise populations or habitat.

***Proposed actions will undergo an environmental analysis to determine whether significant impacts can be mitigated***.

- Cooperate as necessary with the Arizona Game and Fish Department and Animal and Plant Health Inspection Service-Animal Damage Control to control predators of desert tortoise. This will be considered only where predation is interfering with attaining the goals and objectives of the rangewide plan or the Arizona Strategy Plan.

Predation is not considered to be a significant problem in the ***Lower Gila North and South planning units***; however, information on predation will be collected as opportunities arise.

The ***Phoenix Field Office*** will evaluate BLM actions in tortoise habitats to assure that they do not encourage the proliferation or range expansion of predator populations.

- Manage the BLM's energy and minerals program in a manner consistent with the goals and objectives of the rangewide plan and the Arizona Implementation Strategy.

The ***Phoenix Field Office*** will use the BLM's discretionary authorities relating to leasable and salable minerals to meet the category goals and objectives. Due to the habitat needs of the Sonoran desert tortoise, mineral material sales of ornamental boulders have the potential to cause loss of desert tortoise habitat. Boulder sale requests will be carefully considered and permits restricted to areas that will result in no net loss of tortoise habitat.

## Desert Bighorn Sheep Augmentation and Reestablishment

BLM Manual 1745 -- Introduction, Transplants, Augmentations and Reestablishment of Fish, Wildlife, and Plants -- updated March 26, 1992 describes the process under which these actions can take place. The manual section indicates that decisions for making introductions, transplants or reestablishments should be made as part of the land use planning process. Decisions should clearly identify desired population targets or objectives and anticipated distribution of the proposed species. The manual also requires public participation with all potentially affected parties prior to the decision.

Historically, desert bighorn sheep occurred on all of the mountain ranges in the ***planning units***. Desert bighorn sheep populations in some of these mountain ranges are depressed and sheep may be extirpated in a few ranges. The Arizona Game and Fish Department, in cooperation with the ***field office***, will use ***reestablishment*** and augmentation to establish and bolster sheep populations to assist the species in reaching its natural potential. This will be done in areas where conflicts with other uses and resources do not occur ***or*** where conflicts can be resolved.

Final decisions on ***reestablishment*** and augmentation proposals will be considered on a case-by-case basis within the appropriate level of National Environmental Policy Act documentation that addresses conflicts and meets the requirement for public participation.

## Wild Horse and Burro Management

***Same as under the no action alternative, except that, if appropriate following a manageability determination and monitoring, research and analysis of resource use to determine the number of burros that can be maintained in a thriving natural ecological balance with the environment on public lands in each herd area, it is proposed that the Harquahala, Little Harquahala and Painted Rocks herd areas be established as herd management areas. Plans will be developed for all herd management areas, including Alamo. Interdisciplinary habitat monitoring shall be established to determine what constitutes a thriving natural ecological balance. That portion of the wild burro population that exceeds the balance shall be humanely captured and removed from the public lands.***

Livestock range improvements and habitat development projects within wild burro ***herd management areas will be evaluated on a case-by-case basis and, as appropriate, may be modified/ constructed so as to not significantly affect wild burro populations.***

**Goldwater Range** -- The BLM shall collaborate with the Air Force, Tohono O'odham Nation and Bureau of Indian Affairs to maintain the boundary fence between the Reservation and the Goldwater Range.

## Recreation Management

Information from the Arizona Statewide Comprehensive Outdoor Recreation Plan states that: "The large and rapidly growing population has several implications for outdoor recreation. Local providers are hard pressed to keep up with demand for facilities and services. As private development occurs, providing and protecting open space and parkland becomes a critical issue."

To maintain consistency with this statewide recreation plan, the ***Phoenix Field Office*** will provide resource-based recreational opportunities ranging from facilitated recreation sites, such as campgrounds, to remote primitive areas with predominantly unconfined recreational opportunities and minimal regulation.

Primitive areas with low visitation and intensively used areas with high visitation are intermingled and dispersed throughout the ***planning units***. This pattern will be ***maintained*** when considering recreation developments. Lands which are remote or primitive will be managed to retain their present conditions. The undeveloped nature of these lands will be protected as an extremely valuable and scarce resource. Road maintenance and recreation developments such as signing, brochures and information sheets may be provided to promote resource protection through public education and interpretation.

Conversely, recreation facilities and activities requiring a high degree of regulation, or with a high potential for resource impacts, will be focused on accessible, easily maintained lands, near communities and well away from remote, pristine or primitive lands. These facilities and activity areas will be promoted with information fact sheets, brochures or signs to ensure that users can easily locate the most appropriate area for their desired use. Recreational developments and facilities will be designed ***to lessen or avoid economic competition.***

Therefore, the ***Phoenix Field Office*** will provide primarily services and facilities unavailable elsewhere or services and facilities required for visitor safety or resource protection.

***Management of recreation opportunities and developments will be evaluated using two inventory and management tools called the Recreation Opportunity Spectrum (see Appendix C) and Visual Resource Management.***

***The Phoenix Field Office has completed an inventory of Recreation Opportunity Spectrum settings for those lands within the planning boundary (see maps 7 north, central and south). This inventory of recreation settings was completed using 1:100,000 and 1:24,000 maps and field observations. The current Recreation Opportunity Spectrum inventory identifies a mosaic pattern of recreational settings ranging from urban to primitive.***

- ***Recreation Opportunity Spectrum classifications will be reviewed, refined and adopted, during interdisciplinary planning.***
- ***Proposed changes to existing Visual Resource Management are: (1) existing inventory classifications for the Lower Gila South area will be adopted and all Lower Gila North classifications will be brought forward, (2) classifications shall be reviewed and refined during interdisciplinary planning, (3) scenic corridors and potential backcountry byways shall receive priority evaluation to determine appropriate classifications, (4) all wildernesses including the Harcuvar Mountains, Rawhide Mountains, Eagletail Mountains and New Water Mountains within the Yuma and Lake Havasu field office areas shall be designated Class I Visual Resource Management areas and (5) all unclassified lands in the former Lower Gila North Management Framework Plan, the Lower Gila South Resource Management Plan and the Goldwater Amendment planning areas are established as Visual Resource Management Class III areas, subject to review and refinement during future interdisciplinary planning.***

The public lands managed by the ***Phoenix Field Office*** are receiving increasing visitor use and recreation conflicts. To provide the desired recreational opportunities, protect the natural resources which draw the public to these lands and retain the flexibility needed to respond to emerging recreational technologies, the ***Phoenix Field Office*** will address recreation management by focusing on four recreation components -- off-highway ***and special recreation*** vehicle management; designation of special ***and extensive recreation*** management areas; development, management and maintenance of ***camping and camping*** facilities ***and development and management of recreation facilities for*** special uses and scarce opportunities.

### Component One: Off-Highway and special recreation vehicle designation and management

***The Phoenix Field Office recognizes two types of backcountry vehicles -- off-highway vehicles and special recreation vehicles (see Glossary). Map 8 identifies proposed off-highway vehicle designations for the planning units.***

- Designate all public lands described in the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan, as amended, as "limited." Limit off-highway ***and special recreation vehicles*** to existing and/or designated ***roads and*** vehicle routes. ***No unauthorized cross-country vehicle travel will be permitted. Creation of unauthorized*** new ***trails and widening or extending existing trails will not be permitted.*** This includes lands transferred to the ***Kingman, Lake Havasu and Yuma field offices.***
- Plan, ***designate*** and develop ***single- or multiple-use*** off-highway ***and special recreation vehicle areas, routes and management strategies*** through interdisciplinary plans. Planning shall address limits of acceptable change indicators and standards, conflicts, issues and solutions to vehicle management problems.
- Evaluate ***roads and trails used as*** race courses for ***no action, closure, rehabilitation or*** upgrading and authorization ***as a course.***
- ***Conduct site-specific inventories to delineate***

***existing roads and vehicle routes as requested by the authorized officer.***

- Designate the Vekol Valley Grassland Area of Critical Environmental Concern and Coffeepot Botanical Area of Critical Environmental Concern as "limited to designated routes only" with regard to off-highway ***and special recreation*** vehicle use.
- ***Close approved hiking and equestrian trails to unauthorized motorized use.***
- ***Maintain current vehicle management guidance specified as follows.***
  - Enacting road or area closures where off-highway ***or special recreation*** vehicle use is determined to be ***inconsistent with established Recreation Opportunity Spectrum classifications and/or such use is*** causing harm to ***natural or cultural*** resources.
  - Permitting cross-country vehicle travel only when specifically authorized to complete a task which requires such use, and only in areas where such use will not cause unnecessary or undue resource impacts.
  - ***Retaining off-highway vehicle designations for the Goldwater Range as requiring a permit for entry, limited to designated routes in areas of critical environmental concern and designated and/or established routes elsewhere.***
  - ***Retaining*** all congressionally declared wildernesses as closed to mechanized use.
- Develop brochures, maps and information sheets and disseminate off-highway ***and special recreation*** vehicle information to the public.

### Component Two: Designation of special recreation management areas

The BLM differentiates recreation management areas into two classifications -- special and extensive. Special recreation management areas are sub-units of the ***planning units*** that require special management. Delineation is based on similar or interdependent recreation values, ***similar*** or interrelated recreation uses or administrative efficiency.

Extensive recreation management areas are typically the remaining lands not identified as special recreation management areas and constitute the bulk of public lands. Extensive recreation management areas provide locales where ***recreationists*** have freedom of choice and minimal regulatory constraints.

Special recreation management areas are defined in Recreation Opportunity Spectrum terms (see ***Appendix C). The proposed areas range from semi-primitive motorized to roaded natural. Maps 7 north, central and south illustrate the results of the inventory.***

- Establish four special recreation management areas in the ***planning units*** and revise the Crater Range and Sentinel Plain Lava Flow special recreation management areas ***on the Goldwater Range (see Map 9).***
- Complete interdisciplinary planning on all special recreation management areas. Interdisciplinary planning, ***including public involvement,*** will establish their boundaries, determine the type and level of facility development, ***resolve and mitigate impacts to other resources, evaluate and refine*** existing Recreation Opportunity Spectrum ***and Visual Resource Management*** classes, improve recreational opportunities and reduce conflicts among public land users.
- Enact a "designated routes only" off-highway ***and special recreation*** vehicle classification on a management area or site-specific basis ***when needed for resource protection or to ensure consistency with Recreation Opportunity Spectrum classifications.***

#### Vulture Mountains Special Recreation Management Area

- Establish the Vulture Mountains Special Recreation Management Area including lands surrounding Vulture Peak, the Vulture Mine and the Vulture Mountains. Management will emphasize diverse recreational opportunities including trails, ***natural and historic interpretation***, camping and off-highway ***and special recreation*** vehicle use areas.
- ***Authorize*** facilities ***and maintenance*** to protect resource values and improve visitor safety and recreational opportunities.
- Develop single-use and multiple-use trails to meet the demand for hiking, equestrian and mountain biking opportunities.
- ***Provide*** signing, regulations and brochures as needed.

#### Gila Trail Special Recreation Management Area

- Establish the Gila Trail Special Recreation Management Area ***(SRMA)*** including lands surrounding the Gila Trail, the Butterfield Overland Stage Route, the Anza National Historic Trail, the Southern Overland Trail, the Mormon Battalion Trail, the Oatman Massacre Site, the Painted Rock

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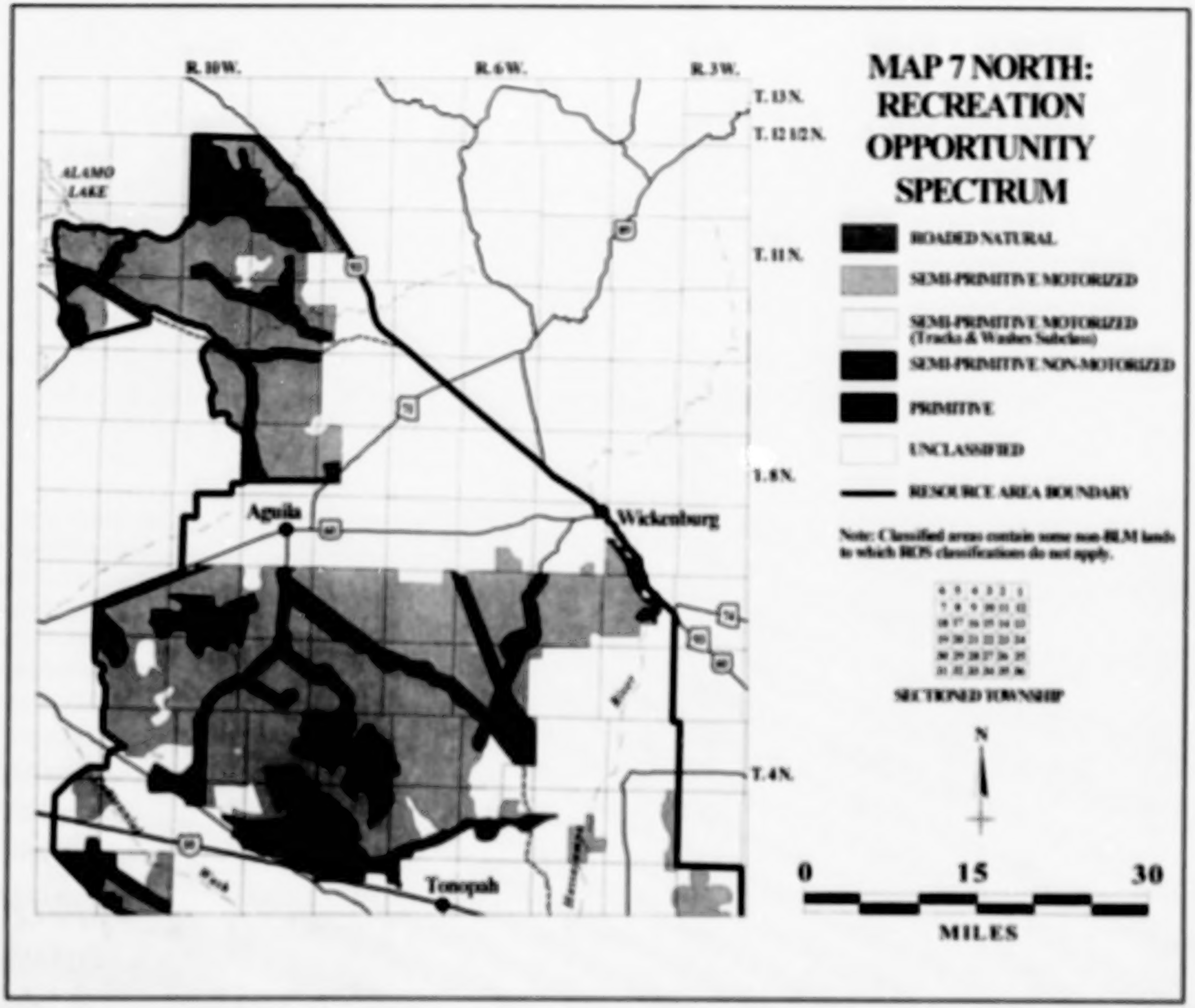
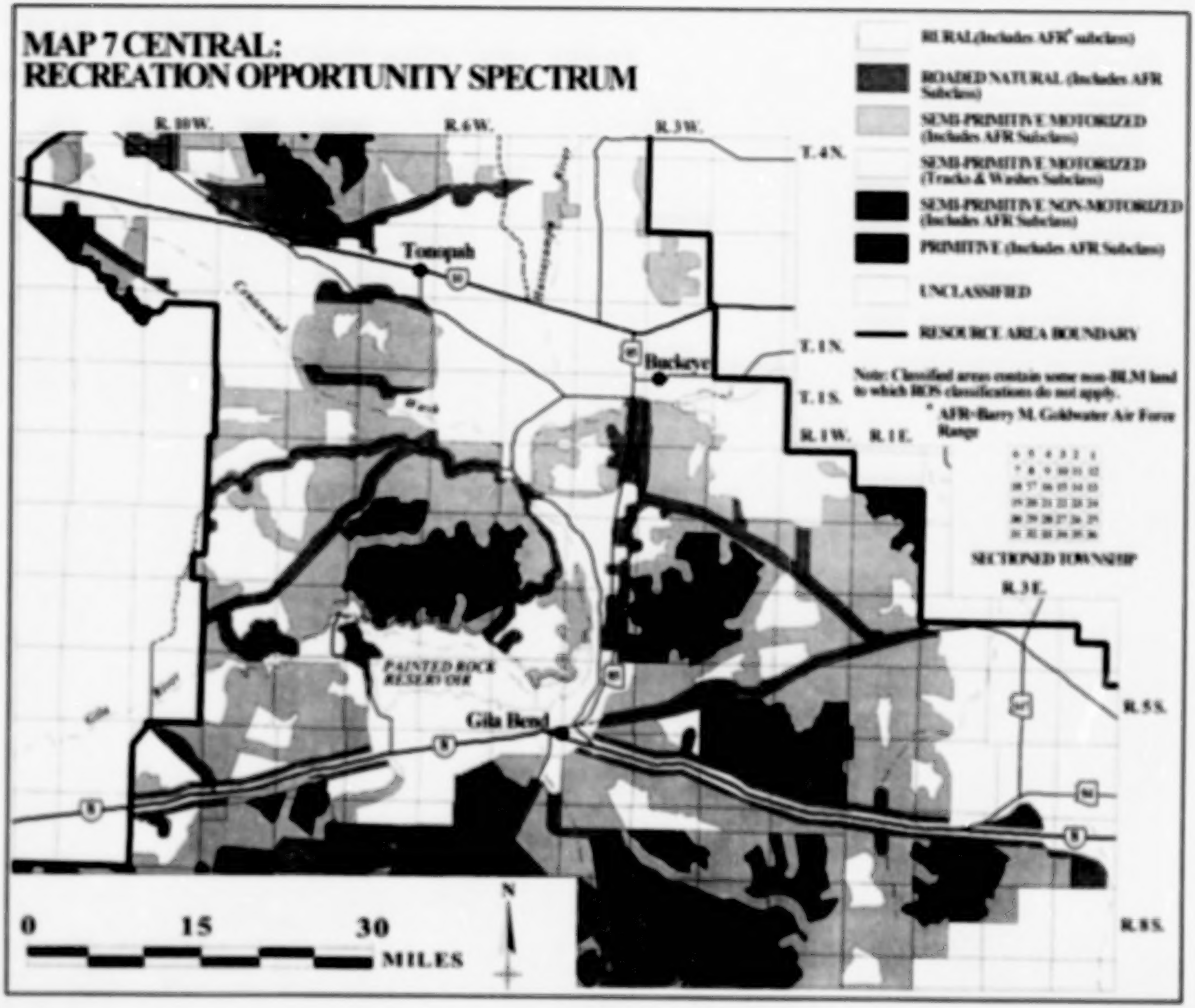


# MAP 7 NORTH: RECREATION OPPORTUNITY SPECTRUM

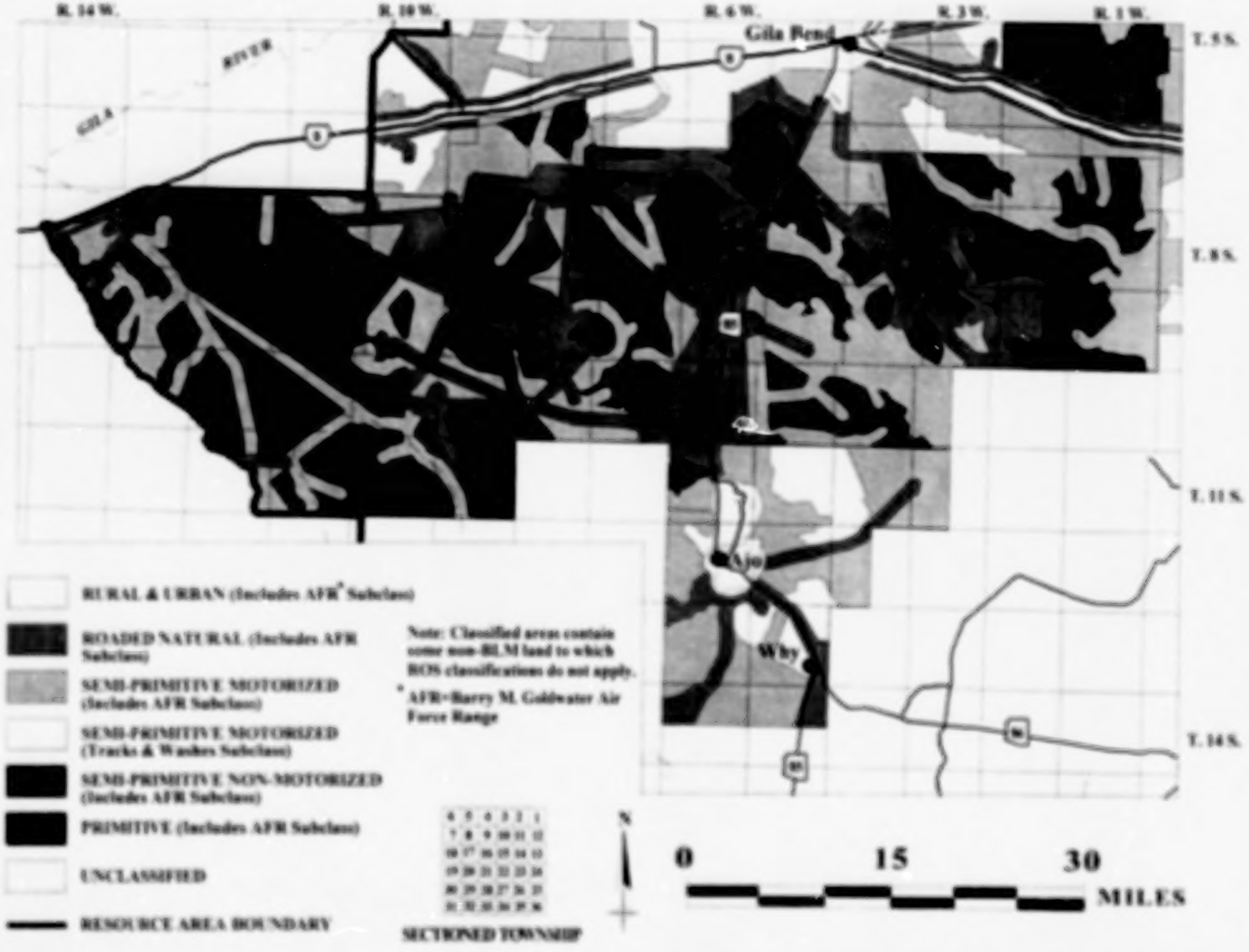
Note: Classified areas contain some non-BLM lands to which ROS classifications do not apply.

# MAP 7 CENTRAL: RECREATION OPPORTUNITY SPECTRUM


RURAL (Includes AFR* subclass)
ROADED NATURAL (Includes AFR Subclass)
SEMI-PRIMITIVE MOTORIZED (Includes AFR Subclass)
SEMI-PRIMITIVE MOTORIZED (Tracks & Washes Subclass)
SEMI-PRIMITIVE NON-MOTORIZED (Includes AFR Subclass)
PRIMITIVE (Includes AFR Subclass)
UNCLASSIFIED
RESOURCE AREA BOUNDARY
Note: Classified areas contain some non-BLM land to which ROS classifications do not apply.
* AFR=Barry M. Goldwater Air Force Range
SECTIONED TOWNSHIP
R. 10 W.
R. 6 W.
R. 3 W.
T. 4 N.
T. 1 N.
T. 1 S.
R. 1 W.
R. 1 E.
R. 3 E.
R. 5 S.
R. 8 S.
Tonopah
Buckeye
Gila Bend
PAINTED ROCK RESERVOIR
Centennial Wash
Gila River
Hassayampa River
N
0
15
30
MILES

28

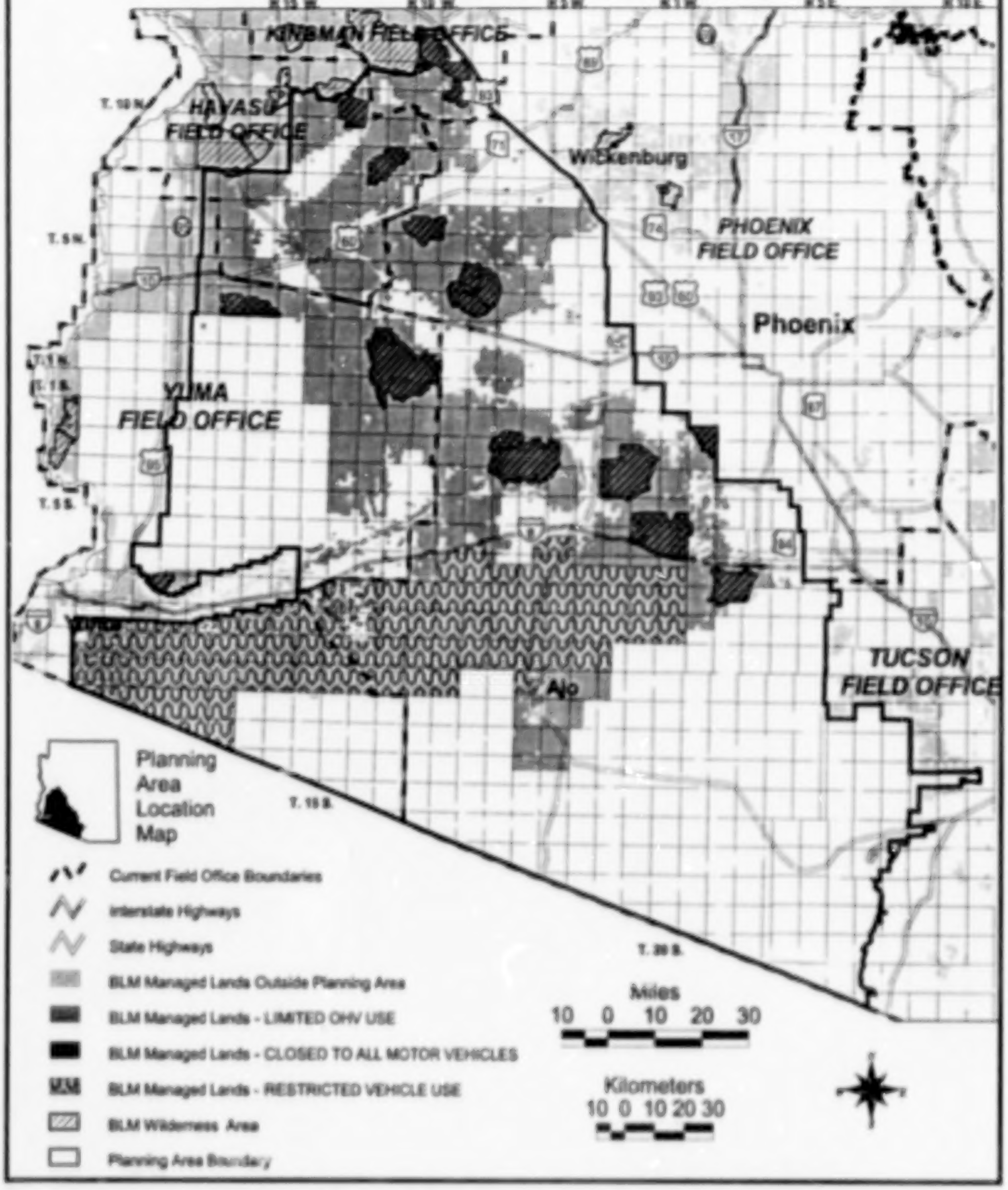
# MAP 7 SOUTH: RECREATION OPPORTUNITY SPECTRUM

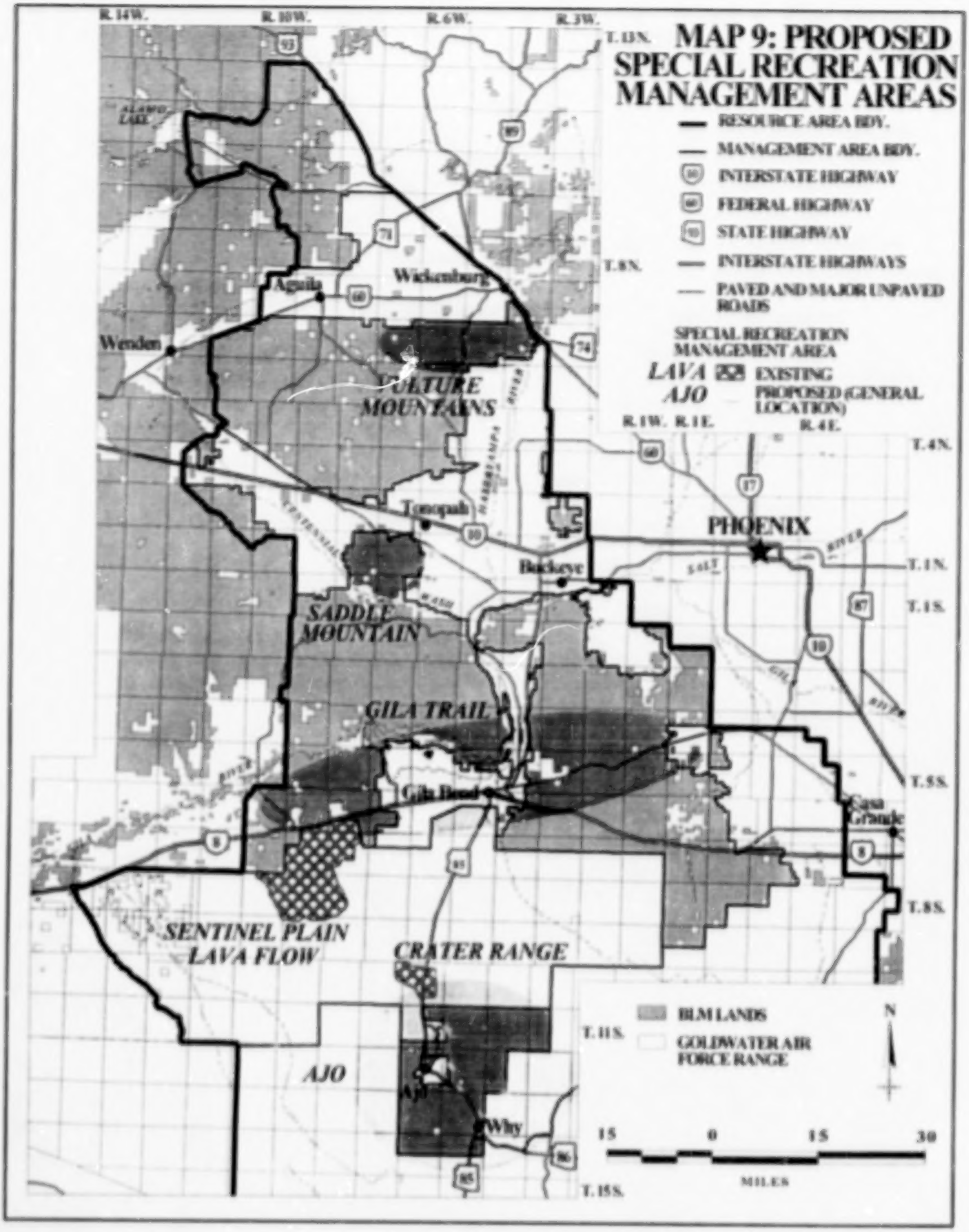

R. 14 W.
R. 10 W.
R. 6 W.
R. 3 W.
R. 1 W.
T. 5 S.
T. 8 S.
T. 11 S.
T. 14 S.
Gila Bend
GILA
RIVER
8
85
86
Ajo
Why
RURAL & URBAN (Includes AFR* Subclass)
ROADED NATURAL (Includes AFR Subclass)
SEMI-PRIMITIVE MOTORIZED (Includes AFR Subclass)
SEMI-PRIMITIVE MOTORIZED (Tracks & Washes Subclass)
SEMI-PRIMITIVE NON-MOTORIZED (Includes AFR Subclass)
PRIMITIVE (Includes AFR Subclass)
UNCLASSIFIED
RESOURCE AREA BOUNDARY
6 5 4 3 2 1
7 8 9 10 11 12
18 17 16 15 14 13
19 20 21 22 23 24
30 29 28 27 26 25
31 32 33 34 35 36
SECTIONED TOWNSHIP
N
0
15
30
MILES

Note: Classified areas contain some non-BLM land to which ROS classifications do not apply.

* AFR=Barry M. Goldwater Air Force Range

# MAP 8: PROPOSED OFF-HIGHWAY AND SPECIAL RECREATIONAL VEHICLE USE





MAP 9: PROPOSED SPECIAL RECREATION MANAGEMENT AREAS

Mountains and associated cultural and recreational features. ***The SRMA boundaries will be determined in an interdisciplinary plan.***

- ***Authorize*** facilities ***and maintenance*** to protect resource values and improve visitor safety and recreational opportunities in ***areas classified as*** rural, roaded natural or semi-primitive motorized.
- ***Develop single-use and multiple-use trails to meet the demand for hiking, equestrian and mountain biking opportunities.***
- ***Mitigate surface-disturbing activities within one-quarter mile of historic and prehistoric trail segments. Inventory and designate all off-highway vehicle routes in the SRMA.***
- Provide signing, regulations ***and brochures*** as needed.

### Saddle Mountain Special Recreation Management Area

- Establish the Saddle Mountain Special Recreation Management Area encompassing the public lands containing Saddle Mountain and the Palo Verde Hills. Management of the area will emphasize providing geologic, cultural and wildlife interpretive sites, protecting the area's scenic landscapes and vistas and promoting recreational opportunities.
- ***Authorize*** facilities ***and maintenance*** along the northern and northeastern portions of the area to ***protect resource values and improve visitor safety*** and recreational opportunities.
- ***Develop single-use and multiple-use trails to meet the demand for hiking, equestrian and mountain biking opportunities.***
- Provide signing, regulations ***and brochures*** as needed.
- Maintain the southern and western portions of the area as remote and ***mostly*** undeveloped.

### Ajo Special Recreation Management Area

- Establish the Ajo Special Recreation Management Area ***encompassing the entire Ajo Management Area.***
- ***Authorize*** facilities ***and maintenance*** to protect resource values and improve visitor safety and recreational opportunities.
- ***Develop single-use and multiple-use trails to meet the demand for hiking, equestrian and mountain biking opportunities.***
- Provide signing, regulations ***and brochures*** as needed.

### Crater Range and Sentinel Plain Lava Flow Special Recreation Management Areas

The Crater Range and Sentinel Plain Lava Flow special recreation management areas, on the Goldwater Range, are restricted to entry by permit only. These areas were designated in the Lower Gila South Resource Management Plan (Goldwater Amendment). ***Existing*** boundaries of the special recreation management areas may be adjusted through interdisciplinary planning to respond to changing land uses. This includes State Highway 85 realignment (Crater Range) and changing recreational uses in both existing special recreation management areas.

- Existing prescriptions authorized by the Goldwater Amendment will be brought forward without change.
- ***Authorize*** facilities ***and maintenance*** to protect resource values and ***improve recreational opportunities*** and visitor safety.
- ***Evaluate single-use and multiple-use trails to meet the demand for hiking, equestrian and mountain biking opportunities.***
- Provide signing, regulations ***and brochures*** as needed.

### Extensive recreation management area

- Conduct project plan level planning for the extensive recreation management area on a case-by-case basis.
- ***Authorize*** primitive facilities where needed for resource protection, visitor safety, improving the recreation experience or increasing recreational opportunities.
- Establish camping locations, camping stay limits, off-highway ***and special recreation*** vehicle use and utilization of the existing natural resources.
- Evaluate long- and short-term camping areas, commercial or competitive off-highway ***and special recreation*** vehicle use areas, scenic turnouts, cultural interpretive sites, hiking, equestrian or mountain bike trails, road and portal signage and road maintenance.
- ***Enact a "designated routes only" off-highway and special vehicle classification on a site-specific basis when needed for resource protection or to maintain consistency with Recreation Opportunity Spectrum classifications.***

### Component Three: Development, Management and Maintenance of Camping and Camping Facilities and Stay Limits

***Maintain the existing 14-day camping stay limit and all associated policy unless otherwise designated. applies to all public lands in the former Lower Gila North and Lower Gila South planning units and those lands transferred to the Kingman, Yuma and Lake Havasu field offices established by Federal Register notice (Vol. 54, No. 215, November 8, 1989).***

***Other regulations and conditions for maintaining or modifying the 14-day stay limit may be identified by the authorized officer or through project planning. Areas may be closed for resource protection, rehabilitation or to reduce conflicts with other uses.***

Establish ***or maintain needed*** camping facilities and length-of-stay limits as prescribed for ***dispersed camping, long-term visitor areas, extended camping areas and short-term camping areas.***

***Dispersed camping — all public land areas***

- ***Permit camping on all public lands unless otherwise designated, closed or restricted for resource protection.***
- ***Permit self-contained or vehicle-based camping within 50 feet of the centerline of designated or existing routes. Cross-country travel to campsites will not be permitted.***
- ***Close trailhead facilities to overnight camping upon written approval of the field manager.***

#### Long-Term Visitor Areas

***Each area will be defined on the ground with fences or signs. Each area will include*** designated roads, designated campsites and amenities to support ***long-term camping occupancy***. Resource factors for implementation, development and rules for development and use are described below (see Glossary for definition of long-term visitor areas).

Resource factors ***to be considered*** for long-term visitor area implementation and development include:

- -- Long-term visitor area development will be permitted only in rural or roaded natural Recreation Opportunity Spectrum classes
- -- Location on rocky or resilient soils
- -- Well-maintained ingress and egress routes
- -- Location within 30 miles of local community
- -- Location outside of category I or II desert tortoise habitat
- -- ***Mitigation if located in Category III desert tortoise habitat***
- -- Location with no cultural resource conflicts
- -- Location outside of burro herd management areas
- -- ***Location of developments in a manner that "is not likely to adversely affect" threatened or endangered species and their habitats***
- -- Location outside of riparian areas
- -- Location outside of areas of critical environmental concern and wild and scenic river areas

Rules for long-term visitor area development and use include:

- -- Long-term camping will be restricted to the term of the permit
- -- Long-term camping will be restricted to designated sites
- -- Services may be provided by contract or local vendor, but the costs of services (firewood, sanitation, trash, water, etc.) will be the responsibility of each occupant
- -- ***Users will be required to comply with all other long-term visitor area regulations***
- -- Long-term visitor area users must comply with all ***local,*** state and federal laws
- -- Long-term visitor area supplementary rules may be enacted as needed

Other regulations and conditions for long-term visitor area use may be identified as required during interdisciplinary project planning. If the interdisciplinary project planning team determines that modifications need to be made to the previously listed guidelines during the planning process, those modifications may be made without the need for a planning amendment. Should other regulations and conditions for use be identified as required during ongoing operation of the long-term visitor area after completion of project planning, such modifications will require public notification.

#### Extended Camping Areas

***These areas will be defined on the ground with fences or signs. Each area will include designated roads, designated campsites and/or areas and amenities where necessary to support extended camping.*** Extended camping areas are similar to long-term visitor areas. Extended camping areas are not integrated within the long-term visitor area system and have a variable stay limit of greater than 14 days. Extended camping areas will have a specific and delineated boundary determined by the ***available resource.***

***Interdisciplinary planning will evaluate and authorize up to six extended camping areas where historic use patterns equate to this type of use and potential new areas that would be suitable for extended camping.***

Resource factors ***to be considered*** for extended camping area development include:

- ***Location only*** in rural, roaded natural or semi-primitive motorized Recreation Opportunity Spectrum classes
- Topographic or vegetative screening
- ***Suitable*** ingress and egress routes
- Location on rocky or resilient soils
- Location within 30 miles of local community
- ***Location outside of Category I desert tortoise habitat***
- Mitigation if located in category II or III desert tortoise habitat
- Location with no cultural resource conflicts
- Location outside of burro herd management areas
- ***Location in a manner that "is not likely to adversely affect" threatened or endangered species and their habitats***
- Location outside of riparian areas
- Location outside of areas of critical environmental concern and wild and scenic river areas

Rules for extended camping area development and use include:

- Restriction to designated sites
- Services may be provided by contract or local vendor, but the costs of services (firewood, sanitation, trash, water, etc.) will be the responsibility of each occupant
- ***Extended camping area visitors must comply with all local, state and federal laws***
- Extended camping area supplementary rules may be enacted as needed

Other regulations and conditions for extended camping area use may be identified as required during interdisciplinary project planning. If the interdisciplinary project planning team determines that modifications need to be made to the previously listed guidelines, those modifications shall be made.

### Short-Term Camping Areas

These areas may be authorized to support resource protection measures in high use areas, to promote equitable use for visitors or to serve as overflow camping adjacent to high use areas. ***Other resource issues*** may require camping areas to be closed during certain times or seasons. Thus, the term of use or the time of use (season) may be limited based on the resource to be protected. These factors will have to be evaluated on a case-by-case basis.

In all cases, short-term camping areas will be designated only where such use promotes resource protection and where all conflicts can be mitigated. ***Each Phoenix Field Office*** short-term camping area will have a specific and delineated boundary ***defined on the ground with fences or signs and*** determined by the available resource.

The following proposed resource factors and rules intended to control resource impacts are included in the amendment.

***Interdisciplinary planning will evaluate short-term camping areas where historic use patterns equate to this type of use and potential new areas that would be suitable for short-term camping.***

Resource factors ***to be considered*** for short-term camping area development include:

- Primitive ingress and egress routes
- Location on rocky or resilient soils
- ***Mitigation if located in category I, II or III desert tortoise habitat***
- Location with no cultural resource conflicts
- Location outside of burro herd management areas
- ***Location of developments in a manner that "is not likely to adversely affect" threatened or endangered species and their habitats***
- Location outside of wildernesses
- Location outside of areas of critical environmental concern and wild and scenic river areas. Rules for short-term camping area development and use include:
- Camping will be restricted to the terms and conditions of that campground.
- Camping will be restricted to designated sites
- Services may be provided by contract or local vendor, but the costs of services (firewood, sanitation, trash, water, etc.) will be the responsibility of each occupant
- Camping area users must comply with all local, state and federal laws.
- Specific supplementary rules may be enacted as needed.

***Other regulations and conditions for short-term camping area use may be identified as required***

***during interdisciplinary project planning. If the interdisciplinary project planning team determines that modifications need to be made to the previously listed guidelines, those modifications shall be made.***

### Component Four: Special uses and scarce opportunities

Aside from camping and off-highway ***and special recreation*** vehicle use, activities that require a scarce resource or that pose a serious threat to public safety were identified by the public scoping meetings as activities that could benefit from increased management. Resource-dependent opportunities include areas for recreational gold panning, rockhounding, hang gliding launches, free climbing, aid climbing, watchable wildlife viewing, cultural interpretation, mountain biking, equestrian uses, hiking trails, ultralight aircraft and shooting.

***Interdisciplinary planning will evaluate and authorize development of special use areas within the planning units.***

## Oil and Gas Development

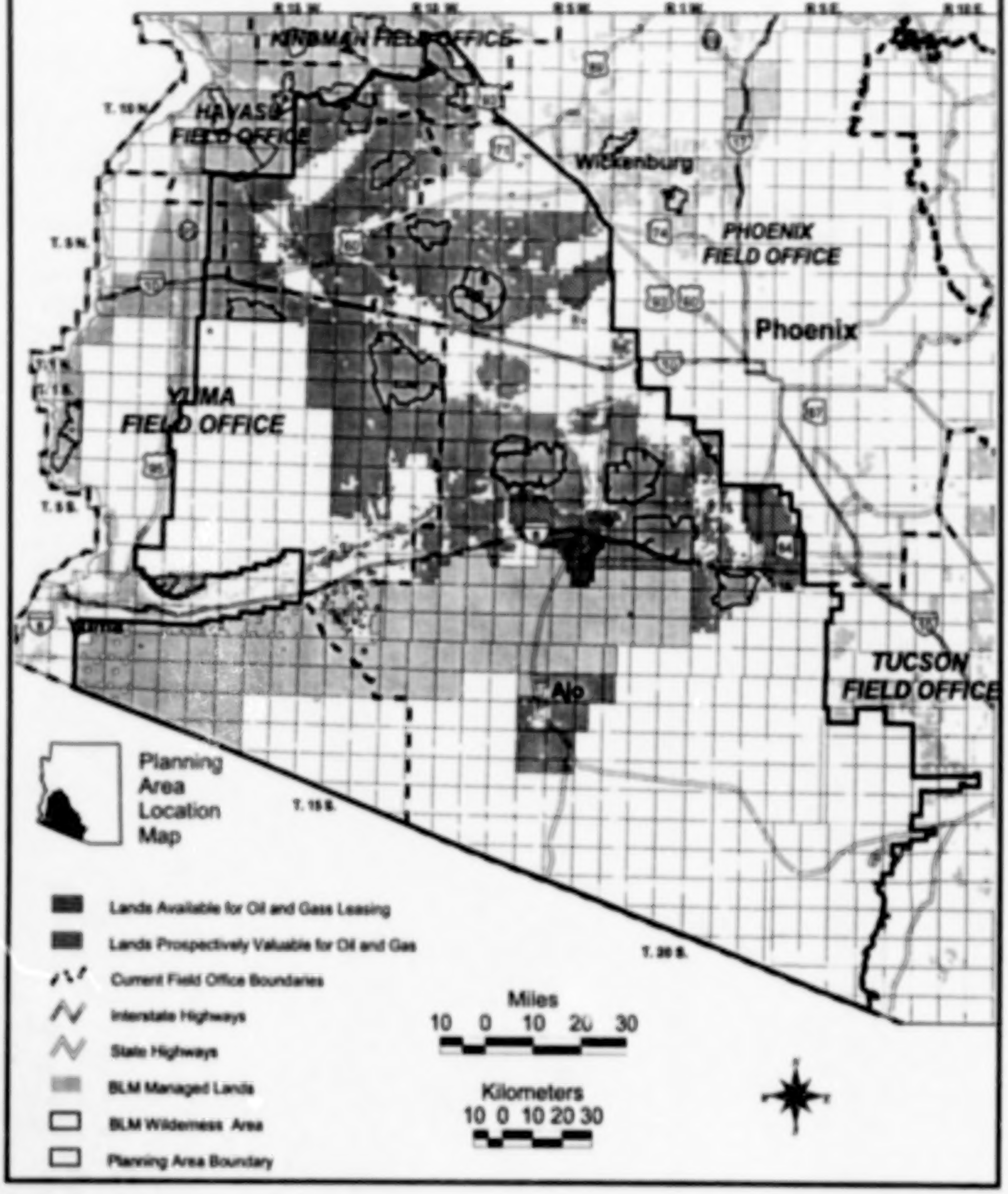
All lands in the planning area not withdrawn or administratively restricted would remain open to oil and gas leasing subject to terms and conditions of the standard lease form. ***A no surface occupancy or other appropriate stipulation will be applied when it is necessary to ensure that proposed and listed threatened or endangered species are not likely to be adversely affected. Conditions of approval will be developed after results of National Environmental Policy Act documentation and incorporated as part of any operational permit.*** Should exploration and/or development be pursued during the life of the amendment, special stipulations will be incorporated into the ***permit*** after the results of site-specific environmental ***analyses.*** Stipulations will mitigate impacts to special status species, cultural areas and other resources susceptible to leasing-related activities.

A few areas of public lands are considered prospectively valuable for oil and gas exploration because of accumulations of sediments more than 1,000 feet in depth ***(see Map 10)***. Due to the lack of economic development of oil or gas wells in the planning area, few lease applications are expected.

***Leases will be issued*** under this alternative during the life of the plan amendment. Only one exploration well is expected; however, up to 10 wells may be drilled. The reasonable foreseeable development for one well is three acres of surface disturbance -- one acre for new roads and two acres for drill pad and support areas.

Approximately 375,000 acres of federal minerals in wildernesses are closed to oil and gas leasing. The approximately 1.6 million acres of federal minerals remaining in the planning area are open to oil and gas leasing.

# MAP 10: OIL AND GAS



# Chapter 3 -- Affected Environment

## Planning Area

The planning area encompasses lands described in the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan, as amended.

### Lower Gila North

The Santa Maria River, one of Arizona's longest ***intermittent*** desert streams, provides the most productive ***riparian*** habitat in the northern end of the region. The riparian area is used by wild burros, livestock and a variety of wildlife. Part of the river corridor is in the Three Rivers Area of Critical Environmental Concern. In addition, 13 miles of river in the Arrastra Wilderness have been recommended for wild and scenic river ***designation.***

Steep mountains and canyons drain abruptly into the Santa Maria River in the northern part of the unit. Broad basins separated by small mountain ranges occur to the south. Mohave and Sonoran desert plants, as well as an extensive riparian plant community, provide unusual ecological diversity.

West of Phoenix, the Vulture, Belmont, Big Horn and Harquahala mountains surround the immense desert basins typical of this region. The area is used by wild burros, livestock, desert bighorn sheep and other wildlife. The Hassayampa River is a wildlife movement corridor for many species, including migratory birds.

Regional attractions include the Arrastra Mountains, Tres Alamos, Big Horn Mountains, Hummingbird Springs and Harquahala Mountains wildernesses and the historic Smithsonian observatory on Harquahala Mountain.

### Lower Gila South

The Gila River, ***which provides riparian habitat,*** drains most of the region. The river provides habitat for waterfowl, shorebirds and raptors. Six wildernesses and the Painted Rocks Petroglyph Campground attract visitors to the region.

The Gila River corridor has been heavily used by humans for thousands of years, as reflected in the rich and diverse array of prehistoric and historic sites that remain. The Gila Trail, also referred to as the Anza Trail, the Mormon Battalion Trail, the Southern Overland Trail and the Butterfield Overland ***Stage*** Route, was a major travel route used by people of many cultures. Portions of the Gila River corridor are being evaluated for nomination to the National Register of Historic Places as national register districts.

To the south, public lands in the Ajo area are bounded by the Papago Indian Reservation ***of the Tohono O'odham Nation,*** Organ Pipe Cactus National Monument, Cabeza Prieta National Wildlife Refuge and the Goldwater Range. The area is mountainous on the east and west sides with an immense desert valley in the center.

In the area south of Ajo and west of Highway 85, habitat for endangered Sonoran pronghorn has been identified. The Coffeepot Area of Critical Environmental Concern, at the eastern border, encloses habitat for the rare Acuna pineapple cactus.

**Goldwater Range** -- The Goldwater Range, 70 miles southwest of Phoenix, encloses approximately ***one million acres of the Lower Gila North and South planning units*** withdrawn for U.S. Air Force fighter pilot training. The Military Lands Withdrawal Act of 1986 (Public Law 99-606) assigned the BLM responsibility for natural resource management on the Goldwater Range. The ***Phoenix Field Office*** administers the eastern Air Force operational portion and the ***Yuma Field Office*** oversees the western Marine Corps section.

The quality of desert habitat is similar to lands administered by Organ Pipe Cactus National Monument and the Cabeza Prieta National Wildlife Refuge. The unit contains habitat for endangered Sonoran pronghorn, desert bighorn sheep and desert tortoise. The range has been closed to mineral entry and livestock grazing since 1941.

## Issues

### Land Tenure

The planning area, approximately 3.5 million acres including the Goldwater Range, is in Maricopa, Yuma, Pima, Pinal, Yavapai and La Paz counties (see Map 1). Maricopa County has the largest bulk of public lands within the ***planning units.*** Most of the public lands within the management areas are blocked up with scattered state and private inholdings. The most common uses for these inholdings are ***farming, ranching and mining***. Isolated public land parcels exist along major highways and near communities. The major population centers are Wickenburg, Gila Bend and Ajo. Ajo, the only landlocked community, is surrounded by public lands, making community expansion difficult.

The disposal of public lands is authorized through sales and exchanges. Disposal is also accomplished through Recreation and Public Purpose Act ***patents*** to local governments and nonprofit organizations. Sales, exchanges and acquisitions are authorized by the Federal Land Policy and Management Act.

Disposal tracts are generally scattered lands outside the resource management areas or lands with low resource values near communities. The ***Phoenix Field Office*** has leased and patented various parcels of land near communities for public purposes under the Recreation and Public Purpose Act as amended.

## Wildlife and Wildlife Habitat

The ***planning units*** are composed primarily of two upland vegetation types -- creosotebush-bursage in the valley bottoms and paloverde-mixed cacti on the bajadas and slopes (Brown and Lowe 1979). Other vegetation types include mixed scrub along the washes, saltbush along the Gila River floodplain, semidesert grasslands dominated by tobosa in areas with heavy soils and small relict areas of interior chaparral on mountaintops. Riparian vegetation types along the Gila and Santa Maria rivers as well as a number of small streams include Sonoran riparian deciduous forests and woodlands, Sonoran riparian scrubland and Sonoran interior strand (Brown and Lowe 1979).

### Unique Habitat

Of the six resource management areas in the ***planning units,*** five were selected in part because they represented large, contiguous blocks of public lands and are important for managing ecosystems and maintaining biodiversity. Unique habitats are those areas which contain rare vegetation, geology, soil or other features. Examples of unique habitats in the ***planning units*** include cliff faces, caves, boulder-strewn slopes, riparian vegetation types, patches of desert grassland and relict interior chaparral vegetation. These "islands" provide important habitat for rare and unique wildlife. Wildlife corridors existing within and between habitat types promote gene flow. This gene flow increases the health and long-term viability of populations, thus sustaining ecosystem biodiversity.

***Three*** areas of critical environmental concern have been designated due to their unique habitats ***(see Map 1).*** The 9,600-acre Coffeepot Botanical Area 15 miles northeast of Ajo was designated because of its unique assemblage of rare plants, including one of the few known locations of Acuna pineapple cactus and the general northern extent of organ pipe cactus. ***Vekol Valley,*** a 3,520-acre area 35 miles southeast of Gila Bend, has been designated. This patch of desert grassland contains a unique assemblage of amphibians. ***The Three Rivers area, partially in the Lower Gila North Planning Unit, is composed of the Big Sandy, Santa Maria and Bill Williams rivers. It is extremely valuable due to its size, year-round water, diversity of vegetation, habitat for bald eagles, peregrine falcon and Southwestern willow flycatcher. All of these species are federally listed as endangered.***

Two areas of unique wildlife habitat have been identified through the BLM Fish and Wildlife 2000 National Strategy Plan Series. The Fred J. Weiler Green Belt was named and classified in 1970 primarily for upland game birds and waterfowl management, as well as public recreation. These 42,850 acres were later carried over as a Key Upland Game Bird Area in *Upland Game Bird Habitat Management "On the Rise"* (BLM 1992). Composed of scattered public land parcels along the Gila River, it includes some of the most productive white-wing and mourning dove nesting habitat in the state.

The other area, identified in *Big Game Habitat Management* (BLM 1993), is the 150,000-acre Sauceda and Sand Tank mountains key habitat area. The complex is mostly on the eastern side of the Goldwater Range and to a smaller extent on adjoining non-withdrawn public lands. It represents the southwestern extent of Coues white-tailed deer range and is an area of distribution overlap for all of the ***Lower Gila North and South planning units'*** big game species.

Characteristic cover sites and their abundance appear to be the best indicators of tortoise habitat. Sonoran desert tortoise habitat, ***in general,*** is below 4,000 feet in elevation on boulder-strewn slopes and in washes that have cut through a caliche layer. ***Desert tortoise in the planning units are most active above ground between July 15 and October 15.*** As described in *Desert Tortoise Habitat Management on Public Lands: A Rangewide Plan* (BLM 1988), public lands in the ***planning units*** have been surveyed for tortoise habitat and in turn categorized. ***The desert tortoise habitat on BLM lands, including the Goldwater Range, is estimated at 560,000 acres of Category I, 998,000 acres of Category II and 141,000 acres of Category III. This represents approximately 48 percent of the total federal acres within the planning units (see Map 6).*** The criteria used to categorize tortoise habitat and the general goals for categorized habitat are included in Table 3 in Appendix B.

The ***planning units*** include all or part of five desert bighorn sheep habitat areas, two of which are classified as Category I. The other three areas are Category II. The goal for Category I areas is to "maintain or enhance the habitat areas currently supporting viable populations of desert bighorn sheep." Likewise, the goal for Category II areas is to "enhance habitat areas with remnant herds that are capable of supporting viable populations" in accordance with the *Rangewide Plan for Managing Habitat of Desert Bighorn Sheep on Public Lands* (1987).

### Threatened or Endangered Species

***Ten*** federally listed ***threatened or*** endangered species ***and one candidate species*** occur within the ***planning units*** (see ***Appendix B*** for additional information).

Sonoran pronghorn are found primarily on bajadas in paloverde-mixed cacti (Brown and Lowe 1979) vegetation types south and west of Ajo. The population is widely dispersed, primarily on the Organ Pipe Cactus National Monument, the Cabeza Prieta National Wildlife Refuge and the Goldwater Range. A few sightings have occurred on public lands south of Ajo and north of Interstate 8 west of Gila Bend. An international interagency core group, ***to which the Phoenix Field Office belongs***, is working on recovery efforts.

Lesser long-nosed bats are migratory, nectar-feeding bats which can range as far north as Phoenix but generally remain south of Interstate 8. Although there are no known maternity colonies within the ***planning units,*** there are known colonies on the Organ Pipe Cactus National Monument, the Cabeza Prieta National Wildlife Refuge and the Papago Indian Reservation ***of the Tohono O'odham Nation.*** This wide-ranging species moves between Mexico and the U.S. Recent estimates indicate as many as 150,000 bats of this species forage in southwestern Arizona on any given summer night, feeding mainly on agave and columnar cacti blooms in paloverde-mixed cacti vegetation.

Yuma clapper rails are medium-sized wading birds that forage and nest among dense vegetation along slow-moving water. They are most abundant ***and occur in scattered locations along the Colorado River. They also occur in scattered locations along the Havasu National Wildlife Refuge and the Gila River.*** Some of the locations along the Gila River are within the ***planning units.***

Brown pelicans, large, fish-eating birds associated with open water, occur in the ***Lower Gila South Planning Unit*** in the vicinity of Painted Rocks Dam.

Bald eagles nest along the Santa Maria, Big Sandy and Bill Williams rivers near their confluence just outside the northwest boundary of the ***planning units.*** There are no known bald eagle nests within the ***planning units,*** although they traverse and possibly forage within its boundaries. Existing nests northwest of the ***planning units*** are on rock ledges along the rivers or in riparian scrubland.

Peregrine falcons are known to occur in the ***planning units. Most of the*** birds sighted are considered to be transient and can potentially be sighted anywhere in the ***planning units*** in any vegetation type.

Gila topminnows and desert pupfish occur at only one established site in the ***planning units*** -- a spring-fed pond along the south bank of the Santa Maria River. ***Yerba Mansa, as it is known,*** is considered to be outside of the historic ranges of these two species.

The Southwestern willow flycatcher is a rare obligate riparian species known to occur along the Santa Maria River.

The rare cactus ferruginous pygmy owl ***may*** occur in the ***planning units*** and on the Organ Pipe Cactus National Monument south of the ***planning units.***

***In addition to the listed species, the Acuna Valley pineapple cactus is a candidate species.*** Acuna Valley pineapple cactus occur within the Coffeepot Botanical Area of Critical Environmental Concern east of Ajo.

Tumamoc globeberry (*Tumamoca macdougalii*), recently ***delisted***, is retained as a BLM sensitive species.

The Sonoran population of desert tortoise, ***a former U.S. Fish and Wildlife Service Category 2 species (see Table 2),*** has received considerable attention due to the listing of the Mohave desert tortoise ***population*** and to the petitions the U.S. Fish and Wildlife Service has received to list the Sonoran ***population***. In the proposed rules (Federal Register, Vol. 56, No. 124, June 1991) responding to a petition to amend the List of Endangered and Threatened Wildlife and Plants to include the Sonoran desert tortoise, the U.S. Fish and Wildlife ***Service*** "determined that listing the Sonoran desert tortoise as threatened or endangered is not warranted at this time." As part of the rationale for this determination, the Service cited the fact that the BLM, which manages approximately 41 percent of the tortoise habitat in Arizona, has specific management policies that provide increased levels of protection for the desert tortoise. These policies are contained in *Desert Tortoise Habitat Management on Public Lands: A Range-wide Plan* and *Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona* (BLM 1990).

Appendix B shows a complete list of special status species.

### Big Game

Of the five big game species in the ***planning units***, desert bighorn sheep are the most sought after and have received the most attention. Desert bighorn occur in every mountain range in the ***planning units*** with the possible exception of the Belmont and Big Horn mountains.

Desert mule deer, occurring throughout the ***area of the planning units*** except on the roughest mountaintops, are the most common big game species in the ***planning units*** and are of the most economic importance. Second in economic importance are javelina, known to occur throughout the ***planning units***, similarly to mule deer, but in extremely low densities in the southern and western portions of the ***planning units***.

Coues white-tailed deer, which reach their southwestern extent in the southeastern corner of the ***planning units***, are limited to the Sauceda and Sand Tank mountains key habitat area (Unit 40A). Pronghorn antelope as a species are considered a big game species. The Sonoran subspecies -- the only antelope that occurs in the ***planning units*** -- is a federally listed endangered species and is not hunted.

Traditionally, habitat improvement for big game species in the ***planning units*** has involved the development of permanent water sources. To date, 20 high-elevation waters, primarily for desert bighorn sheep, and 90 low-elevation waters to benefit deer and javelina have been developed. Wildlife water development, including securing water rights for wildlife use, will likely continue to be a priority in the ***planning units***. In addition to the game species for which these developments were constructed, they also provide water for a multitude of non-game species.

## Wild Horses and Burros

### Alamo Herd Management Area

The Alamo Herd Management Area encompasses approximately 335,000 acres in Yavapai, La Paz and Mohave counties. The herd management area extends from Highway 93 north of Alamo Road along the Santa Maria River and adjacent uplands west to include Alamo Lake and the Bill Williams River to the confluence of the Bill Williams River and Centennial Wash. It includes portions of the Swansea, Rawhide, Arrastra and Aubrey Peak wildernesses. ***The Alamo Herd Management Area contains the Alamo Wildlife Area, which, except for livestock grazing, wild burros and wilderness, is under Arizona Game and Fish Department management.***

Riparian vegetation in the Alamo Herd Management Area is typical of the cottonwood-willow and mesquite series described by Brown and Lowe (1979). Upland vegetation is typical of the creosote-bursage and paloverde-mixed cacti series (Brown and Lowe 1979).

In 1991, the burro population of the herd management area was estimated to be approximately 300 animals, based on a Lincoln Petersen Index population census. The current population is estimated to be 500 to 600 animals, using an annual recruitment rate of 20 percent. Since 1977, more than 1,400 burros have been captured and removed from this herd management area. However, the distribution of wild burros in the region has expanded beyond the herd area boundaries defined by the relevant planning documents in the ***Phoenix, Kingman and Lake Havasu field offices.***

### Harquahala Herd Area

The Harquahala ***Herd Area*** includes approximately 167,000 acres of Basin and Range physiographic province in western Maricopa County within the Big Horn Management Area. It contains portions of the Harquahala, Big Horn and Hummingbird Springs wildernesses. Vegetation is typical of the creosote-bursage and paloverde-mixed cacti series described by Brown and Lowe (1979).

The herd size in the area is estimated to be 100 to 200 animals. In the early 1980s, 11 burros were captured and removed from the Harquahala Mountains. In 1989, 20 burros were trapped at the Aguila Ranch Headquarters. Recently, burros have expanded their range beyond the herd area boundary and now range south of the Big Horn and Belmont mountains to Interstate 10. Private residential and agricultural lands border the herd area on the northeast and south. Burros straying into farmfields north of Tonopah have damaged alfalfa and cotton crops. The BLM ***Phoenix Field Office*** has received several letters and verbal requests for removal of nuisance burros in the Tonopah area.

### Painted Rock Herd Area

The Painted Rock Herd Area in southwest Maricopa County below the Painted Rock Dam along the Gila River contains about 10,700 acres of river bottom between the Painted Rock Dam and Oatman Mountain. Approximately 28,000 acres of the herd area are upland volcanic flow in a region known as the Sentinel Plain. Vegetation is typical of the creosote-bursage and paloverde-mixed cacti series described by Brown and Lowe (1979). This herd area is entirely within the Gila Bend Management Area.

In June 1980, specialists estimated the burro population to be 15 to 25 animals. In 1993, a herd area inspection indicated the presence of 20 to 40 animals. In 1992, five nuisance burros were removed from the herd area in response to written requests from private landowners.

### Little Harquahala Herd Area

This herd area includes approximately 66,000 acres of Basin and Range physiographic province in eastern La Paz County. The vegetation is typical of the creosote-bursage and paloverde-mixed cacti series described by Brown and Lowe (1979). The herd area, administered by the ***BLM Lake Havasu Field Office***, includes most of the Little Harquahala Mountains and substantial private and state lease agricultural holdings along Centennial Wash.

The herd size is estimated to be between 50 and 100 animals. In 1989, the BLM, in cooperation with the Grazing Advisory Board, began removing burros from this herd area. From 1989 to 1991, approximately 75 were captured and removed. This herd area is entirely within the ***Lake Havasu Field Office*** area.

### Goldwater Range

Burros have been observed on the Goldwater Range east of Highway 85, north and west of the Papago Indian Reservation ***of the Tohono O'odham Nation***. Vegetation is typical of the creosote-bursage and paloverde-mixed cacti series described by Brown and Lowe (1979). Field inspections in 1992 revealed that the boundary fence between the Goldwater Range and the Reservation was down at every major drainage. Burro trails were observed in the Quilotosa, Sauceda and Midway washes leading from the Reservation to the Goldwater Range.

BLM and Air Force natural resource specialists conclude that burros occasionally found on the Goldwater Range are domestic burros from the Reservation. A representative of the Tohono O'odham Nation confirms that burros belonging to people of the Nation sometimes stray when the boundary fence is down, usually in the major drainages listed above. Other knowledgeable public comment supports the view that Reservation burros occasionally stray onto the Goldwater Range when the boundary fence has been washed out.

## Recreation

Arizona is a prime tourism destination. The Arizona Statewide Comprehensive Outdoor Recreation Plan states: "The large and rapidly growing population has several implications for outdoor recreation. Local providers are hard pressed to keep up with demand for facilities and services. As private development occurs, providing and protecting open space and parkland becomes a critical issue."

The outdoor recreation plan also supplies a summary of local and statewide recreation issues which reflect the information gathered in the scoping conducted for this amendment. Identified issues include the need for development of off-highway vehicle areas, trails and related facilities; the need for protection of cultural and natural resources; the importance of primitive camping opportunities ***and the need to protect heritage*** resources.

Increases in visitation can be expected as residents seek to escape the city for weekend and evening recreational opportunities. Current recreation uses include long-term camping, ***three to five*** off-highway vehicle events ***annually***, jeep tours, hiking, hunting, wildlife watching and visiting historic and scenic places.

***The planning units contain 370,000 acres of existing wilderness (see Map 1) in 11 wildernesses and a portion of the Santa Maria River proposed for designation as a wild and scenic river. There are also***

***several roads and highways that may be identified as scenic corridors or backcountry byways during off-highway vehicle planning.***

***Recreation Opportunity Spectrum classification and mapping are complete (see Map 7). Visual Resource Management classification results are available and may be reviewed at the BLM Phoenix Field Office.***

## Oil and Gas Development

The planning area is within the Basin and Range physiographic province and is characterized by northwest- to southeast-trending fault-block mountain ranges separated by down-dropped sediment-filled basins. The province underwent extensive east-west crustal extension during the middle to late Tertiary period 30 million to eight million years ago. Crustal extension resulted in movement along numerous faults. Mineral resources that occur in this region include gold, silver, copper and manganese (Wilson et al., 1967; Keith et al., 1983).

No known geological structures or geothermal resource areas are identified in the ***planning units.*** BLM Manual 3021 states that lands underlain by sedimentary rock with a thickness of 1,000 feet or more are considered to be prospectively valuable for oil and gas. No economic occurrences of oil or gas have been encountered in wells drilled in the ***planning units.*** There are no existing leases for exploration or development for oil and gas in the ***planning units.*** There has been no public interest for oil and gas leasing since 1989. The Goldwater Range is withdrawn from mineral entry and lands designated as wilderness are no longer available for mineral leasing.

## Socioeconomics

The planning area includes all or part of La Paz, Maricopa, Pima, Pinal, Yavapai and Yuma counties. The Phoenix and Tucson communities, with nearly 70 percent of the state's population, are slightly east of the ***boundary of the planning units.*** Other communities which may be affected include Buckeye, Casa Grande, Gila Bend, Marana, Oro Valley, Parker, Yuma, Wickenburg and Prescott. Interstate highways 8, 10 and 17 bisect the area and provide major ports of entry into and through the state. State highways 60, 85, 97, 89 and 93 are major travel routes and connect the affected communities (see ***Appendix E*** for comparison tables and additional information on socioeconomics).

**Population** -- County populations annually have grown on the average about five percent between 1970 and 1980, and 3.5 percent between 1980 and 1990. The city populations in total have generally followed the same growth pattern.

State projections indicate that collectively these counties will continue to average two percent annual growth between 1995 and 2020. Projections made for cities over the same period are 2.3 percent for the faster growing cities and 0.8 percent for the remaining communities.

**Employment** -- The distribution of employment in the planning area closely resembles ***that of*** the state due to the inclusion of the state's two most populated counties. Total employment, including farm and nonfarm, varies widely among counties. Approximately 99 percent of employment in the study area is from nonfarm sectors. Over the past five years, farm ownership has decreased about one percent annually, while total farm employment has remained relatively stable. Agricultural services have increased about three percent annually.

Retail, services and government sectors were the most important nonfarm employers in all the counties and in the state, providing between 62 and 71 percent of the total employment in all counties. State and local government was the main employer in all cases. These sectors grew by more than two percent annually. Transportation and public utilities, wholesale trade and agricultural services all grew about three percent or more each year.

**Unemployment** -- Unemployment averaged 5.5 percent each year from 1987 to 1993 in the planning area. There was substantial variation among the six counties, between five and 22 percent. The state averaged six percent annually during the same period.

**Income** -- Total personal income includes farm and nonfarm income, dividends, interest, rents and other payments. Farm income was approximately 18 percent of the total income in La Paz, 10 percent in Yuma and seven percent in Pinal County. The remaining three counties have less than one percent of the total income coming from agriculture.

Services, retail trade and government sectors were the major income providers in La Paz, Pima, Yavapai and Yuma counties, providing between 60 and 67 percent of the nonfarm income. Manufacturing was in the top three sectors in Maricopa and mining and manufacturing were in the top three in Pinal County.

# Chapter 4 --
# Environmental Consequences

## Introduction

To analyze the impacts of each alternative, it was necessary to make general assumptions.

-- The BLM will have the funding and work force to implement the selected alternative.

-- All management actions will comply with appropriate laws, regulations and policies.

-- The period of analysis for this project is 10 years. Short-term impacts would occur within five years and long-term impacts would occur more than five years after the plan is implemented.

-- All impacts are long term unless otherwise noted.

-- There are no irretrievable and irreversible commitments of resources, relationship between short-term and long-term productivity, unavoidable adverse impacts, mitigating measures and residual impacts associated with the no action and proposed action alternatives.

-- All disposal lands must meet Federal Land Policy and Management Act criteria.

-- Lands identified for disposal would go into nonfederal ownership unless otherwise noted.

-- Direct effects are caused by the activity and occur at the same time and place. Indirect effects are caused by the action but are later in time or further removed in distance.

-- Where data are limited, the analysis infers environmental consequences using knowledge of the area and professional expertise and judgment based on observation and analysis of conditions and responses in other areas.

Consultation with appropriate Native American tribes and traditional leaders will be carried out to obtain comments during the planning review process as well as during later planning and environmental assessments for specific actions. This will ensure that Native American religious concerns are considered during decision making. This consultation will be done in accordance with the National Environmental Policy Act, the National Historic Preservation Act, as amended and the American Indian Religious Freedom Act of 1978. Consultation will also occur for cultural resources permitting and data recovery under the Archaeological Resources Protection Act and the Native American Graves Protection and Repatriation Act.

***The no action and proposed action alternatives have been analyzed and no impacts are anticipated to areas of critical environmental concern, floodplains, hazardous waste, prime and unique farmlands and wild and scenic rivers.***

## No action --Current Guidance

As needed, site-specific environmental analysis, in conformance with the National Environmental Policy Act, will be completed prior to implementation of the management actions.

### Land Tenure Adjustments

**Disposal** -- This alternative identifies 62,260 acres of scattered isolated parcels of public lands for disposal. Disposing of these lands into private ownership would increase the tax base of the counties involved. ***Disposal***, by exchange, would allow for the acquisition of lands with high resource values such as riparian habitat, wilderness, wildlife habitat, cultural resources and recreational values throughout the state.

**Acquisition** -- This alternative identifies for acquisition approximately 10,735 acres of primarily state lands with potential for containing high natural resource values. The local tax base would not be affected by the acquisition of state lands.

#### Minerals

Disposal of public lands would not prevent exploration and development of minerals on these areas; however, revenue from oil and gas leasing would be lost. Revenue loss is considered nominal due to the low mineral potential and lack of oil and gas leases in the ***planning units.***

#### Cultural Resources

Disposal of lands may remove some archaeological sites from public ownership. Before any National Register eligible site is removed from public ownership, appropriate mitigation measures will be developed in consultation with the State Historic Preservation Office and/or the Advisory Council on Historic Preservation and implemented prior to disposal. Acquisition of lands may bring National Register eligible cultural resources into public ownership.

### Native American Religious Concerns

Disposal and acquisition of lands may or may not impact specific resources and locations utilized by Native Americans. Native Americans will be consulted to determine whether properties of traditional cultural or religious importance are present and at risk should a particular parcel of land be disposed of by the BLM. Consultation will also determine if the acquisition of particular lands will enhance utilization of these types of resources due to the added level of protection and accessibility that public ownership would bring.

### Threatened or Endangered Species

No known habitat for threatened or endangered species has been identified for disposal. ***A biological assessment has not been completed to determine the effects of the no action alternative.***

### Socioeconomics

Disposal of 62,260 acres of BLM-administered lands and acquisition of 10,735 nonfederal acres in the planning area are expected to have a negligible positive or adverse effect on the tax base of the local counties. In cases where federal lands are converted to private ownership in one county and exchanged for private lands in another county, the loss of in lieu payments would be less than two percent for any county. If federal lands are converted to ***private*** lands, there may be a resulting increase in the tax base. These disposal and acquisition acres are less than one percent of the total federal acres. BLM lands represent approximately 25 percent of the total federal lands in the planning area. About two percent of the BLM acres are identified for disposal or acquisition.

Land tenure adjustment can be expected to result in more efficient management and a reduction in management costs to the BLM.

### Other Critical Elements and Resources

***Implementation of the no action alternative would have no impacts on air quality, recreation, water quality, wetlands and riparian zones, wild horses and burros, wilderness and wildlife.***

## Desert Tortoise Habitat Management

The Arizona strategy plan for desert tortoise ***will*** ensure no net loss of desert tortoise habitat. Management of tortoise habitat will constrain other public land uses in meeting the goal of no net loss of habitat.

### Range

***Desert tortoise habitat management could negatively impact domestic livestock grazing use. Management of desert tortoise to assure no net loss of quality and quantity of habitat could potentially restrict the length of time ephemeral grazing may take place in any given year and may require season-of-use restrictions on perennial allotments.***

***Desert tortoise habitat management could impact the development of range improvements for livestock. Such improvements proposed in desert tortoise habitat will be carefully considered and may be modified or relocated to minimize impacts to desert tortoise.***

### Wild Burros

***Desert tortoise habitat management could have a negative impact on wild burro use. Management of desert tortoise to assure no net loss of quality and quantity of habitat could potentially require reduction of wild burro populations. However, this is appropriate under the guidance to manage burros in a thriving natural ecological balance with multiple-use resource components.***

### Wildlife

***Desert tortoise habitat management could have a negative impact on the management of other wildlife species. Management to assure no net loss of quality and quantity of desert tortoise habitat may require the placement of facilities for other wildlife species in less than desirable locations. In addition, wildlife reestablishment may be limited to reduce habitat conflicts.***

### Socioeconomics

Implementation of the no action alternative will ***have an impact*** on livestock management in desert tortoise habitat. The potential for increased costs to the rancher will continue to occur due to ***desert tortoise prescriptions in the management of ephemeral operations. This could impact individual ranchers; however, on a field office basis, these*** impacts are not expected to be significant.

***Some mineral development, particularly boulder sales, will be mitigated and/or restricted, causing some economic impact. Since boulders are available on non-BLM lands, impacts are not expected to be significant.***

### Other Critical Elements and Resources

***Implementation of the no action alternative would have no impacts on air quality, cultural resources, land tenure***

***adjustment, minerals, Native American religious concerns, recreation, threatened or endangered species, water quality, wetlands and riparian zones and wilderness.***

## Desert Bighorn Sheep Augmentation and Reestablishment

***Land use planning authorizes cooperative reestablishment of desert bighorn sheep in the planning units*** that could only take place in the vicinity of Black Mountain. ***Reestablishment*** could not be used as a tool to benefit other desert bighorn sheep populations ***in other mountain ranges*** in the ***planning units. Augmentations could be used as a tool to benefit other desert bighorn sheep populations.*** This alternative will negatively impact the ability of desert bighorn sheep to reach their ***natural potential populations.***

### Range

***Desert bighorn sheep habitat considerations may affect the design and construction of range improvements, stocking rates, class and/or kind of livestock permitted, forage utilization, season of use and the use of grazing rotation techniques.***

### Wild Burros

***If, through habitat monitoring, indications are that demand for forage by livestock, wild burros and wildlife exceeds supply, the BLM would consult with the Arizona Game and Fish Department and other interest groups to develop management actions that would bring the populations into thriving natural ecological balance. This may include BLM management actions to reduce wild burro populations.***

### Socioeconomics

***Implementation of the no action alternative is expected to have no substantive adverse or beneficial impacts to recreation and hunting, although it would contribute to the quality of the recreation and hunting experience.***

### Other Critical Elements and Resources

***Implementation of the no action alternative would have no impact on air quality, cultural resources, land tenure adjustment, minerals, Native American religious concerns, recreation, threatened or endangered species, water quality, wetlands and riparian zones, wilderness and wildlife.***

## Wild Horse and Burro Management

***Wild burros in the herd management areas and herd areas are comparable with other resource values. For impact analysis, it may be assumed that proper management of a species in a thriving natural ecological balance with its habitat precludes habitat degradation.***

***Maintenance of viable wild burro herds in a thriving natural ecological balance with their habitat will benefit wild burros by protecting habitat values and avoiding overpopulation. If any of the multiple-use resource components are adversely impacted or if, through habitat monitoring, indications are that demand for forage by livestock, wild burros and wildlife exceeds supply, the BLM would consult with the Arizona Game and Fish Department and other interest groups to develop management actions that would bring the populations into thriving natural ecological balance. This may include management actions to reduce wild burro populations.***

### Range

***If any of the multiple-use resource components are adversely impacted or if, through habitat monitoring, indications are that demand for forage by livestock, wild burros and wildlife exceeds supply, the BLM would consult with interest groups to develop management actions that would bring the populations into thriving natural ecological balance. This may result in reductions of livestock numbers or changes in use, creating some economic loss for affected permittees. Burros will have free access to livestock water sources. Therefore, burros may compete with livestock for water, when water is limited. Social interactions between burros and livestock may also limit livestock use of water sources. New and some existing range improvements would need to be designed to ensure free burro movement within the herd management area and herd areas. This would have a minimal impact on rangeland management.***

### Threatened or Endangered Species

***The Phoenix Field Office is managing wild burros in thriving natural ecological balance with other natural resource components. Southwestern willow flycatchers were listed as an endangered species in 1995. The impact of current wild burro management on this species has not been evaluated. If this no action alternative is selected, the field office would have to bring wild burro management into compliance with the Endangered Species Act.***

### Wildlife

***If any of the multiple-use resource components are adversely impacted or if, through habitat monitoring, indications are that demand for forage by livestock, wild burros and wildlife exceeds supply, the BLM would consult with the Arizona Game and Fish Department and other interest groups to develop management actions that would***

***bring the populations into thriving natural ecological balance. This may include management actions by the Arizona Game and Fish Department that would reduce populations of wildlife species.***

### Recreation

***Recreationists perceive wild burros in differing ways regarding their contribution to the quality of the recreational experience. Whereas burro droppings and noise present a nuisance to some hikers and campers, others enjoy burro watching as a form of recreation.***

### Wilderness

***In the Arrastra and Harquahala Mountains wildernesses, some visitors may find the wilderness experience diminished by the presence of wild burros while others may find that the burros enhance the wilderness experience.***

### Water Quality

***Wild burros using riparian habitat could minimally contribute to sedimentation from trampling and elevated levels of nutrients and bacteria from animal waste in the Santa Maria and Gila rivers.***

### Socioeconomics

***The BLM is mandated to manage wild burros in a thriving natural ecological balance in herd areas and the herd management area. Costs for removal of excessive animals and management of burros would be borne by the BLM.***

### Other Critical Elements and Resources

***Implementation of the no action alternative would have no impact on air quality, cultural resources, land tenure adjustment, minerals, Native American religious concerns and wetlands and riparian zones.***

## Recreation Management

### Air Quality

***Continued case-by-case authorization of commercial/competitive race courses will cause impacts from dust and vehicle emissions during the event.***

### Cultural Resources

***Potential adverse impacts will continue due to unrestricted vehicle access. The potential exists for proliferation of vehicle routes to cultural sites, which will increase the opportunity for intentional or unintentional damage.***

### Wildlife

***Lack of off-highway and special recreation vehicle designation in Lower Gila North would increase vehicle route proliferation and visitor use in areas of desert tortoise and other wildlife species habitat. Impacts from such increased interaction with humans and vehicles could disrupt the species and its habitat or increase mortality.***

### Wetlands and Riparian Zones

***Adverse impacts to wetlands and riparian areas would continue due to the lack of restriction of off-highway and special recreation vehicle use along the Santa Maria and Hassayampa rivers.***

### Socioeconomics

***Impacts to the business community are not anticipated.*** Implementation of the no action alternative would ***continue current*** costs to the BLM to ***enforce*** the 14-day stay limit and off-highway vehicle restrictions.

***Recreationists would benefit in the short term due to lack of restrictions, but may be adversely affected in the long run by resource degradation.***

### Other Critical Elements and Resources

***Implementation of the no action alternative would have no impacts on land tenure adjustment, minerals, Native American religious concerns, threatened or endangered species, recreation, water quality, wild horses and burros and wilderness.***

***Implementation of the no action alternative will serve to retain existing Visual Resource Management classifications for wildernesses. Evaluations and refinement of current Visual Resource Management classifications will not be official. Scenic corridor Visual Resource Management classifications would remain as currently identified.***

## Oil and gas development

The absence of oil and gas exploration since 1989 is expected to continue. Applications for exploration wells will be analyzed and considered on a case-by-case basis. Each application will require ***an amendment to the existing resource management plan or management framework plan*** before approval. Potential negative impacts are expected to be minor due to the standard mitigation guidelines for oil and gas.

### Socioeconomics

Implementation of the no action alternative is expected to have no positive or negative impact on local communities.

There have been no wells drilled in the past 10 years and there is a low probability that any will be drilled in the future.

**Other critical elements and resources**
***Implementation of the no action alternative would have no impact on air quality, cultural resources, land tenure adjustment, Native American religious concerns, recreation, threatened or endangered species, water quality, wetlands and riparian zones, wild horses and burros, wilderness and wildlife.***

### Cumulative Impacts

The no action alternative is the continuation of current management actions. The ***Phoenix Field Office*** plans would not be in conformance with current BLM policy and guidance regarding ***off-highway vehicle designations.*** No other adverse or beneficial cumulative impacts are anticipated from implementation of this alternative.

## Proposed Action

No significant adverse or beneficial impacts are anticipated to air quality, water quality, prime or unique farmlands, floodplains, solid or hazardous wastes or wild and scenic rivers.

***The U.S. Fish and Wildlife Service concurs with the BLM's determination that the proposed plan amendment may affect, but is not likely to adversely affect, the Sonoran pronghorn, lesser long-nosed bat, Gila topminnow, desert pupfish, Yuma clapper rail, peregrine falcon, brown pelican, bald eagle and cactus ferruginous pygmy owl.***

***The Service concluded that the proposed action was not likely to jeopardize the continued existence of the Southwestern willow flycatcher and provided reasonable and prudent measures with terms and conditions for implementation. The results of the consultation between the BLM and the Service are included as Appendix F.***

Appropriate tribes and traditional leaders will be consulted to obtain comments during the planning review process as well as during later planning and environmental assessments for specific actions. This will ensure that Native American religious concerns are considered and potential significant adverse impacts are avoided. This consultation will be done in accordance with the National Environmental Policy Act, the National Historic Preservation Act, as amended and the American Indian Religious Freedom Act of 1978. Consultation will also occur for cultural resources permitting, data recovery and inventory collections under the Archaeological Resources Protection Act and the Native American Graves Protection and Repatriation Act.

***As needed, site-specific environmental analysis, in conformance with the National Environmental Policy Act, will be completed prior to implementation of the management actions.***

### Land Tenure Adjustments

**Disposal** -- The proposed action identifies ***34,100*** acres of scattered isolated parcels of public land for disposal. ***Fewer acres are available for disposal under this alternative. More lands would be retained within the management areas for resource management. The lands identified for disposal*** are considered to be difficult and uneconomical to manage and are more suitable for development or use by private individuals or local government agencies. Disposing of these lands would result in slight increases in the county tax base for the counties in which the lands are located. Disposal of these lands by exchange would also allow for the acquisition of lands containing high resource values such as riparian habitat, ***wilderness,*** wildlife habitat, ***cultural resources*** or recreation values throughout the state.

**Acquisition -- More lands could potentially be acquired under this alternative.** Acquisition of private and state lands within the management areas would consolidate ownership. Lands retained and acquired would form a more manageable land pattern. Consolidation of lands would improve management efficiency and thus reduce management costs. The local tax base should not be affected by acquisition of state lands. ***All acquisitions would involve willing parties.***

**Minerals**
***Same as under the no action alternative***

**Cultural Resources**
***Same as under the no action alternative***

**Native American Religious Concerns**
***Same as under the no action alternative***

**Socioeconomics**
***Same as under the no action alternative except that the BLM will dispose of 34,100 acres.*** These disposal acres are ***approximately*** one percent of the total federal acres.

**Other Critical Elements and Resources**
***Same as under the no action alternative***

## Desert Tortoise Habitat Management

***The Arizona strategy plan for desert tortoise will ensure no net loss of desert tortoise habitat. Management of tortoise habitat will constrain other public land uses in meeting the goal of no net loss of habitat.***

### Range

***Same as under the no action alternative***

### Wild Burros

***Same as under the no action alternative***

### Wildlife

***Same as under the no action alternative***

### Socioeconomics

***Same as under the no action alternative***

### Other critical elements and resources

***Same as under the no action alternative***

## Desert Bighorn Sheep Augmentation and Reestablishment

***Under this alternative, cooperative augmentations would continue and reestablishment of desert bighorn sheep*** could take place throughout the ***planning units*** following site-specific analysis on a case-by-case basis. Augmentation and reestablishment could be used as a tool to benefit other desert bighorn sheep populations in the ***planning units.*** This alternative will benefit the ability of desert bighorn sheep to reach their ***natural potential*** population levels.

### Range

***Same as under the no action alternative***

### Wild Burros

***Same as under the no action alternative***

### Socioeconomics

***Reestablishment of desert bighorn sheep may increase revenues from hunting and improve opportunities for wildlife viewing and other recreational pursuits.***

### Other Critical Elements and Resources

***Same as under the no action alternative***

## Wild Horse and Burro Management

***Same as under the no action alternative***

### Range

***Same as under the no action alternative, except that some livestock water sources may not be accessible to wild burros.***

### Threatened or Endangered Species

***The biological evaluation for the proposed action alternative of this plan amendment concluded that the impact of wild burro management may adversely affect Southwestern willow flycatchers. The U.S. Fish and Wildlife Service has concluded in its biological opinion that the proposed action as it relates to wild burro management would not jeopardize continued existence of the flycatcher. In its biological opinion, the Service issued reasonable and prudent measures with mandatory terms and conditions that the BLM will implement to minimize any effect on the species or its habitat.***

### Wildlife

***Same as under the no action alternative***

### Recreation

***Same as under the no action alternative***

### Wilderness

***Same as under the no action alternative***

### Water Quality

***Same as under the no action alternative***

### Socioeconomics

***Same as under the no action alternative***

### Other critical elements and resources

***Same as under the no action alternative***

## Recreation Management

### Air Quality

***Near long-term visitor areas and extended camping areas, dust, exhaust from recreation vehicles and electrical generators, human and animal waste odors, etc., could periodically affect air quality if present in large volumes.***

***If off-highway vehicle planning reauthorizes commercial/competitive race courses, impacts from dust and vehicle emissions will increase during the event.***

### Cultural Resources

North of ***Centennial Wash/the Buckeye Canal,*** limiting off-highway vehicle use to existing routes will make many cultural properties less vulnerable to accidental or intentional damage. South of ***Centennial Wash/the Buckeye Canal,*** potential adverse or beneficial impacts to cultural resources would remain the same due to current limitations to existing routes.

***Interdisciplinary planning decisions will protect sensitive cultural resources by locating camping sites and facilities on lands without cultural resource conflicts.***

### Water Quality

***Beneficial impacts are anticipated from: contracting sanitary services in areas of high visitor concentration.***

### Wetlands and Riparian Zones

***Beneficial impacts are anticipated from interdisciplinary planning decisions and mitigation locating intensive uses in non-wetland/non-riparian areas.***

### Wilderness

***Beneficial impacts are anticipated from establishing all wildernesses as Visual Resource Management Class I which provides primarily for natural ecological changes only.***

### Socioeconomics

Development of long-term camping facilities can be expected to provide a ***cash flow*** to neighboring communities throughout the winter season. The level of income provided is dependent on the size of the facility, ***service to be contracted*** and the length of use. Additional beneficial impacts ***are anticipated*** to local communities from off-highway vehicle ***events. Socioeconomic impacts from*** special management area designations and authorizations for special uses are expected to be negligible on the study area; however, individual communities could be positively impacted.

Additional management costs for development of facilities, monitoring and resource protection will be borne by the BLM.

### Other Critical Elements and Resources

***Implementation of the proposed action alternative would have no impact on land tenure adjustment, minerals, Native American religious concerns, recreation, wild horses and burros and wildlife.***

## Oil and Gas Development

The development of 10 exploration wells will result in 30 acres of surface disturbance under this alternative. Over the entire ***Lower Gila North and South planning units,*** this is considered to be an insignificant amount.

### Socioeconomics

Implementation of the ***proposed*** action alternative is expected to have no positive or negative impact on local communities. There have been no wells drilled in the past 10 years and no more than 10 are anticipated.

### Other critical elements and resources

***Same as under the no action alternative.***

## Cumulative impacts

The management changes identified in the proposed action do not represent a significant deviation from current management guidelines. The proposed action alternative will provide the opportunity for facilitated recreation, consistent off-highway vehicle designations and improved management efficiency. It also brings the ***Phoenix Field Office*** planning documents into conformance with current BLM policy and guidance. Some slight beneficial impact to Arizona is expected from improved recreation and resource management. Indirectly, the additional knowledge base will also improve due to additional monitoring, research and inventory. No other adverse or beneficial cumulative impacts are anticipated.

# Chapter 5 -- Consultation and Coordination

## Scoping

Approximately 190 letters were sent to elected representatives, agencies, organizations and individuals announcing the start of amendment planning with a series of public meetings.

Ten scoping meetings were held between late February and early April 1994 -- ***in Ajo, Gila Bend (two meetings), Wickenburg, Sun City West (two meetings), Buckeye, Phoenix, Why (by request) and Tucson (by request).*** Recreation management was the major concern raised by the public. Other concerns included land tenure, wild burros and oil and gas leasing.

A total of 51 letters and calls were received during the formal 30-day comment period. Again, most comments and suggestions were about recreation, ranging from the development of many types of facilities to maintaining the status quo. Wild burros and land tenure adjustments received the next largest amount of comments. All comments about burros either said to maintain them or remove them. Most comments about lands said not to sell the public lands, but many were favorable to ***exchange.***

Several letters received after the formal comment period requested that the Coffeepot Area of Critical Environmental Concern off-highway vehicle designation of "closed" be changed to "limited." About 270 preprinted postcards, sponsored by the Ajo Traditional Land Use Council, urged that:

-- vehicle access in the Coffeepot should be changed from "closed" to "limited vehicle use,"
-- the 14-day camping limit should be enforced on BLM lands surrounding Ajo,
-- wild burros on BLM lands surrounding Ajo should be closely controlled and
-- no new access restrictions be imposed in the Ajo area.

***A call*** from the chairman of the Hickiwan District of the Tohono O'odham Nation and two letters from ranch workers stated that reservation burros have wandered onto the Goldwater Range due to downed sections of fence.

Meetings were held with representatives of Region IV of the Arizona Game and Fish Department and members of the Ajo Traditional Land Use Council.

As a result of scoping, transplanting desert bighorn sheep was identified as an issue. Since reestablishment and augmentation should be made a part of the land use planning process as stated in the BLM manual, it was added to the amendment as an appropriate issue.

Due to public interest generated during scoping, off-highway vehicle designation for the Coffeepot Area of Critical Environmental Concern is addressed in this amendment rather than in a subsequent special recreation management area plan.

## *Review of Draft Amendment/Environmental Assessment*

***Approximately 750 copies of the draft document were distributed to those who received notices about the scoping meetings, signed in at the meetings and requested copies. Copies also were available for review at four local libraries and the BLM Phoenix Field Office. Notices of the availability of the draft document and open houses were sent to 53 newspapers and radio stations.***

***To review the draft with the public, seven open houses were held between early December 1994 and early January 1995 in Wickenburg, Buckeye, Gila Bend, Phoenix, Tucson, Why and Ajo. They provided an opportunity for people to talk individually with BLM resource specialists and to leave written comments.***

***Sixty-one written comments were received during the formal 60-day comment period. A form letter expressing concerns in the Ajo area was submitted by 210 people. The comments are reproduced at the end of this chapter with the BLM responses.***

***Meetings were held with the U.S. Fish and Wildlife Service and the Arizona Game and Fish Department to discuss their written comments. Native American consultation was held with the legislative branch of the***

***Tohono O'odham Nation. Formal consultation was held with the U.S. Fish and Wildlife Service.***

***See the summary at the beginning of this document for additions and changes due to comments from the public and various agencies.***

***Environmental Justice Policy***

***The BLM's mandate on environmental justice, Presidential Executive Order 12898, requires that all members of the public have the right to participate meaningfully in the BLM's processes and the activities affecting their health, welfare and other matters in the community. An integral part of the scoping process noted above was to identify environmental justice issues relating to the social, cultural, economic and health conditions of minorities and low-income groups on BLM lands and in BLM activities. The strategy to identify minorities and low-income groups requires additional outreach efforts. This consists of using all available knowledge of the area and consulting with Native American tribes to determine if any interested groups exist. Socioeconomic profiles of the county and surrounding communities are referenced and information on statewide alliance groups is researched and used where appropriate.***

***Through research, the scoping process and the draft review period, the general public was notified and invited to become involved in the plan amendment/environmental assessment process. Consultation with the tribes in the region has been conducted and will continue throughout the process. No specific issues have been identified that might impact minority or low-income groups as a result of the proposed plan. Future actions that might result from decisions reached would be subject to further outreach and specific analysis to determine whether any such groups would be affected.***

# Agencies, Organizations and Elected Representatives Who Will Receive the Final Amendment

## Indian Nations, Tribes and Councils

Ak-Chin Indian Community
Colorado River Indian Tribes
***Fort Yuma-Quechan Tribe***
Gila River Indian Community
Hopi Tribal Council
***Pasqua Yaqui Tribe***
Salt River Pima-Maricopa Community Council
Tohono O'odham Nation
Yavapai-Prescott Tribe

## Federal Agencies

- Department of Agriculture
    - Forest Service
    - ***Natural Resource Conservation Service***
- Department of Defense
    - Air Force
    - Army Corps of Engineers
- Department of Energy
    - Western Area Power Administration
- Department of the Interior
    - Bureau of Indian Affairs
    - Bureau of Reclamation
    - Fish and Wildlife Service
    - National Park Service
- Department of Justice
    - Immigration and Naturalization Service
- Environmental Protection Agency

## Arizona State Agencies

Arizona Commission of Agriculture and Horticulture
Arizona Commission on the Environment
Arizona Department of Agriculture
Arizona Department of Environmental Quality
Arizona Department of Mines and Mineral Resources
Arizona Department of Transportation
Arizona Department of Water Resources
Arizona Game and Fish Department
Arizona Geological Survey
Arizona State Clearinghouse
Arizona State Historic Preservation Office
Arizona State Land Department
Arizona State Mine Inspector
Arizona State Parks

## Local Agencies

City of El Mirage
City of Goodyear
City of Surprise
La Paz County Manager
Maricopa County Board of Supervisors
Maricopa County Environmental Quality and Community Services Agency
Maricopa County Flood Control District
Maricopa County Parks and Recreation Department
Maricopa County Planning and Development Department
Maricopa County Department of Transportation
Phoenix Parks, Recreation and Library Department
Pinal County Board of Supervisors
Pima County Parks and Recreation Department
Town of Buckeye
Town of Gila Bend
Town of Wickenburg
Town of Youngtown
Yavapai County Board of Supervisors
Yavapai County Planning and Zoning Department
Yuma County Planning and Zoning Department

## Interest Groups

Ajo District Chamber of Commerce
Ajo Solid Waste Committee
Ajo Traditional Land Use ***Chapter, People for the West***
***Ajo-Why Ultra-Light Flyers Association***
Arizona Archaeological Society
Arizona Cattle Growers Association
Arizona Desert Bighorn Sheep Society
Arizona Mining Association
Arizona Mining and Prospecting Association
Arizona Parks and Recreation Association
Arizona Public Service Company
Arizona Roamers
Arizona State Association of Four-Wheel-Drive Clubs, Inc.
***Arizona State Horsemen's Association***
Arizona Wilderness Coalition
Arizona Wool Producers Association
Blue Ribbon Coalition, Inc.
Cyprus Bagdad Copper Company
Defenders of Wildlife
Desert Donkey and Mule Club
Desert Tortoise Council
El Paso Natural Gas Company
Gila Bend Natural Resource Conservation District
***Greater Arizona Bicycling Association, Cochise Chapter***
International Society for the Protection of Mustangs and Burros
International Sonoran Desert Alliance
***National Wildlife Federation***
The Nature Conservancy, Arizona Chapter
People for the West
Phelps Dodge Corporation
Salt River Project
Sierra Club, ***Palo Verde and Rincon Groups, and Southwest Region***
Sonoyta Camara de Commercio
***Southwest Center for Biological Diversity***
Southwest Minerals Explorers Association
***Tonopah Area Coalition***
Tonopah Valley Association
Western Pima County Community Council
Why, Ajo, Lukeville Development, Inc.
Why Utility Company, Inc.
Wickenburg Natural Resource Conservation District
Wild Horse Organized Assistance
The Wilderness Society, ***Southwest Region***
Yavapai Cattle Growers

## Elected Representatives

### Federal

Senator Jon Kyl
Senator John McCain
Representative Matt Salmon
Representative Ed Pastor
Representative Bob Stump

Representative John Shadegg
Representative Jim Kolbe
Representative J.D. Hayworth

**State**
Governor Fife Symington (former)
Governor Jane Hull
Senator Janice Brewer (former)
Senator Scott Bundgaard
Senator Jim Buster (former)
Senator Pat Conner
Senator Chris Cummisky
Senator Carol Springer
Senator John Wettaw
Representative Don Aldridge
Representative Ken Cheuvront
Representative David Eberhart
Representative Joe Hart
Representative Sue Lynch
Representative Robert McLendon
Representative Robert Updike (former)
Representative John Verkamp

## List of preparers

### Team Members

Fareed Abou-Haidar, Geographic Information System Assistant
Hector Abrego, Team Leader
Bill Childress, Team Leader (former)
Tim Goodman, Wildlife Biologist (former)
David Konopka, Assistant Team Leader (former)
Carol Laver, Team Leader (former)
Kyle Mohan, Range Specialist
Hank Molz, Team Leader (former)
Wendell Peacock, Writer-Editor
Jane Pike, Archaeologist (former)
John Reid, Outdoor Recreation Planner (former)
Mark Schwab, Geologist

### Phoenix Field Office Assistance

Gordon L. Cheniae, District Manager (former)
Paul Buff, Resource Advisor (former)
John Christensen, Area Manager (former)
John Anderson, Botanist
Gene Dahlem, Supervisory Natural Resource Specialist
Frank Daniels, Realty Specialist (former)
Rich Hanson, Supervisory Outdoor Recreation Planner
Chris Horyza, Information Resources Management
Lin Fehlmann, Water Rights Specialist
Shela McFarlin, Resource Advisor (former)
Raymond Singleton, Staff Assistant

### Yuma Field Office Assistance

Judy Reed, District Manager (former)
Joy Gilbert, Area Manager (former)
Don Applegate, Nonrenewable Resources Advisor
Dave Curtis, Realty Specialist
Roger Oyler, Wild Horse and Burro Specialist
Dave Smith, Wildlife Biologist

### Lake Havasu Field Office Assistance

Joe Liebhauser, Area Manager (former)
Les Allert, Outdoor Recreation Planner
Cindy Barnes, Range Specialist
Clifton Bobinski, Wilderness Specialist
Mike Henderson, Supervisory Natural Resource Specialist
Aline LaForge, Archaeologist
Elroy Masters, Wildlife Biologist
Karen Montgomery, Realty Specialist

### Arizona State Office Assistance

Denise P. Meridith, State Director
Lester K. Rosenkrance, State Director (former)
Bruce P. Conrad, Associate State Director (former)
Herman Kast, Deputy State Director, Lands and Renewable Resources (former)
Larry P. Bauer, Deputy State Director, Mineral Resources (former)
Ted Bingham, Deputy State Director, Operations (former)

# Comment Letters Received

## Government Agencies and Native American Nations, Tribes and Councils

| No. | Name | Location |
|---|---|---|
| 53 | Arizona Department of Environmental Quality | Phoenix |
| 54 | Arizona Game and Fish Department | Phoenix |
| 12 | Arizona State Historic Preservation Office | Phoenix |
| 45 | Arizona State Land Department | Phoenix |
| 48 | Luke Air Force Base, Environmental Programs | Luke Air Force Base |
| 41 | National Park Service, Organ Pipe Cactus National Monument, | Ajo |
| 47 | Town of Buckeye | Buckeye |
| 43 | U.S. Fish and Wildlife Service, Arizona Ecological Services | Phoenix |
| 10 | Yavapai-Prescott Indian Tribe | Prescott |

## Schools, Companies, etc.

| | | |
|---|---|---|
| -- | (No number, placed at end of comments) Ajo District Chamber of Commerce, Ajo Traditional Land Use Chapter of the People for the West and Western Pima County Community Council | Ajo |
| 52 | Arizona State University, Center for Environmental Studies | Tempe |
| 44 | Grapevine Springs Ranch, Inc. | Wickenburg |
| 59 | K Lazy B Ranch | Salome |
| 51 | Why, Ajo, Lukeville Development, Inc. | Ajo |

## Interest Groups

| | | |
|---|---|---|
| 9 | Ajo-Why Ultra-Light Flyers Association | Why |
| 29 | Arizona Desert Bighorn Sheep Society, Inc. | Phoenix |
| 24 | Greater Arizona Bicycling Association, Cochise Chapter | Ft. Huachuca |
| 58 | International Society for the Protection of Mustangs and Burros | Scottsdale |
| 50 | Sierra Club, Grand Canyon Chapter, Palo Verde Group | Phoenix |
| 57 | Sierra Club, Grand Canyon Chapter, Rincon Group, Conservation | Tucson |
| 56 | Sierra Club, Grand Canyon Chapter, Rincon Group, Outing | Tucson |
| 37 | The Nature Conservancy, Arizona Chapter | Phoenix |
| 40 | The People for the West, Ajo Traditional Land Use Chapter | Ajo |
| 42 | Tonopah Area Coalition | Tonopah |
| 8 | Two O'clock Rock Group of Ajo | Ajo |

## Individuals

| | | |
|---|---|---|
| 33 | FORM LETTER (see comment letter for list of senders) | Ajo-Why area |
| 35 | Bonz, Ron | Tonopah |
| 27 | Broyles, Bill | Tucson |
| 15 | Cornett, Bobby and Leah | Why/Colorado |
| 49 | Feller, Joseph M. | Tempe |
| 28 | Floyd, Thomas L. | Arkansas |

|  |  |  |
|---|---|---|
| 36 | Gibson, Susan M. | Canada |
| 13 | Grayson, Kenneth | Oregon |
| 19 | Ham, Derill | Idaho |
| 1 | Hartley, Michael R. | Michigan |
| 38 | Hathaway, M. Pat | Tonopah |
| 6 | Henry, Palmer and Carol | Gila Bend/Canada |
| 14 | Hester, Charley and Dorothy | Missouri |
| 18 | Jones, Robert H. | Why |
| 17 | Machande, Carl | New Mexico |
| 31 | Martell, John | Wisconsin |
| 60 | Martin, Malcolm E. | Canada |
| 3 | McPheeters, Jim and Mary | Gila Bend/Missouri |
| 22 | McSherry, David B. | Ajo |
| 61 | Melts, Harry | Why |
| 2 | Moats, Charles D. | Gila Bend |
| 5 | Mollin, Donna R. | Gila Bend |
| 4 | Molas, William H. | Gila Bend |
| 46 | Motz, Hank | Phoenix |
| 26 | Morat, Walter | Washington |
| 23 | Norstrup, Allen | Ajo |
| 25 | Notestine, Jim | Sonoita |
| 34 | Pamperin, John | Phoenix |
| 20 | Regan, John T. | Why |
| 32 | Rossi, Lisa | Ajo |
| 39 | Shaw, Judith C. | Tonopah |
| 30 | Weaver, Craig | Tonopah |
| 16 | Weber, Ramon J. | California |
| 7 | Wellman, Dorothy | Michigan |
| 11 | Westfall, Leo and Irene | Ohio |
| 21 | Wilson, Keith R. | Ajo |
| 55 | Wirt, Elizabeth B. | Tucson |

**1**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR I would like To see Long Term Access To public Land For The purpose of Long Term camping. Through out The Lower Gila Resource Area

Signature Michael R. Hartley Date 12/13/94
Print name Michael R. Hartley
Print address PO Box 149
ALBA Mich Zip 49611

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**2**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

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GR Gila Bend spot. BLM land behind Holt Texaco. Please leave it as is. No limit on days to stay. Water wagon and Honey wagon idea sounds real good to me. Would be willing to pay a fair fee for both.

We are very happy camping in our desert, we're like one big happy family. Lots of campers have used the same spot for at least seven years. We clean up [illegible] are proud of the desert. Please let us enjoy the land like we have been doing.

Edna Moats

Signature Charles D. Moats Date 12/13/94
Print name CHARLES D. MOATS
Print address BOX 633 GILA BEND, AZ
Zip 85337-0633

3

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

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GR

Fugitive Camp - near Gila Bend - The live it primitive. Please do no more than absolutely necessary - However we do want to stay for more than 14 days - Would be looking to pay for a long term permit. Please no LTVA! We want space - No crowded neighbors -

Signature Jim & Mary McPheeters Date 12-13-94
Print name Jim & Mary McPheeters
Print address Gen Delivery Gila Bend Az 85337
or 3808 Woodson, Raytown MO Zip 64133

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4

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR

I would like to have the BLM Camping area at Gila Bend near Hy 8 behind the Texaco Gas Station be changed to extended stay instead of the 14 day Camping.
And the camp sites left the way they are. 14 day Camping does not work for us. We feel we shouldn't have to go some place else. As the town of Gila Bend and Arizona can use the revenue.

Signature William H. Malin Date 12-14-94
Print name Wm. H. Malin
Print address GENERAL DELIVERY
GILA BEND AZ Zip 85337

**5**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR I would like to have the BLM Camping area at Gila Bend near Hy 8, behind the Texaco Gas Station be changed to extended stay instead of 14 day camping.

We drive 2800 miles just to stay here but it would not pay to come that far for just 14 days. We come here to camp for medical, warmth and enjoyment. We really like the state of Arizona very much, and would really hate to go elsewhere. I feel the town of Gila Bend profit greatly from the campers as they can really use the benefits.

We come here the 1st week of Oct and leave the end of April so 14 day limit does not work for us.

We would like the campsites left the way they are.

Signature Donna R. Molin Date 12-16-94

Print name DONNA R. MOLIN

Print address GENERAL DELIVERY

Gila Bend, AZ. Zip 85337

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**6**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

Dec 16/94

Gila Bend

Desert BLM. Land off old # 8 Hwy

GR We want Desert Camping as Long Term Est in this area Camper's will Dump and take Garbage to Dumping Station In Town.

PJ Henry

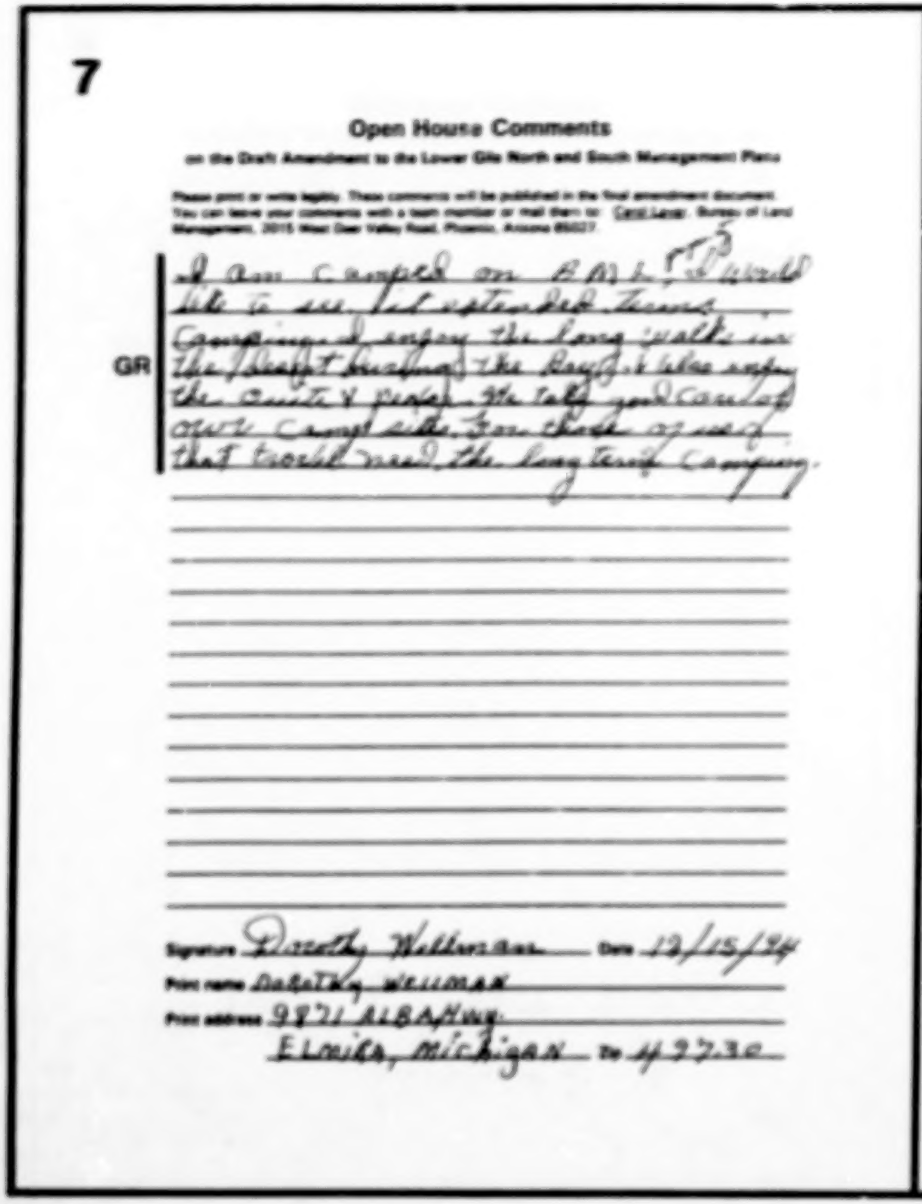
Signature Palmer J Henry Date Dec. 16/94

Print name Palmer & Carol Henry

Print address P.O. Box 472

Bruderheim AB. Canada Zip T0B 0S0

Or Gila Bend
General Del
Arizona 85337



7

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Laver, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR I am camped on BLM LTVA. I would like to see [illegible] extended term camping. I enjoy the long walks in the [illegible] the [illegible]. I also enjoy the quite & peace. We take good care of our camp site. For those of us that would need the long term camping.

Signature Dorothy Wellman Date 12/15/94

Print name DOROTHY WELLMAN

Print address 9871 ALBA Hwy.

ELMIRA, MICHIGAN Zip 49730

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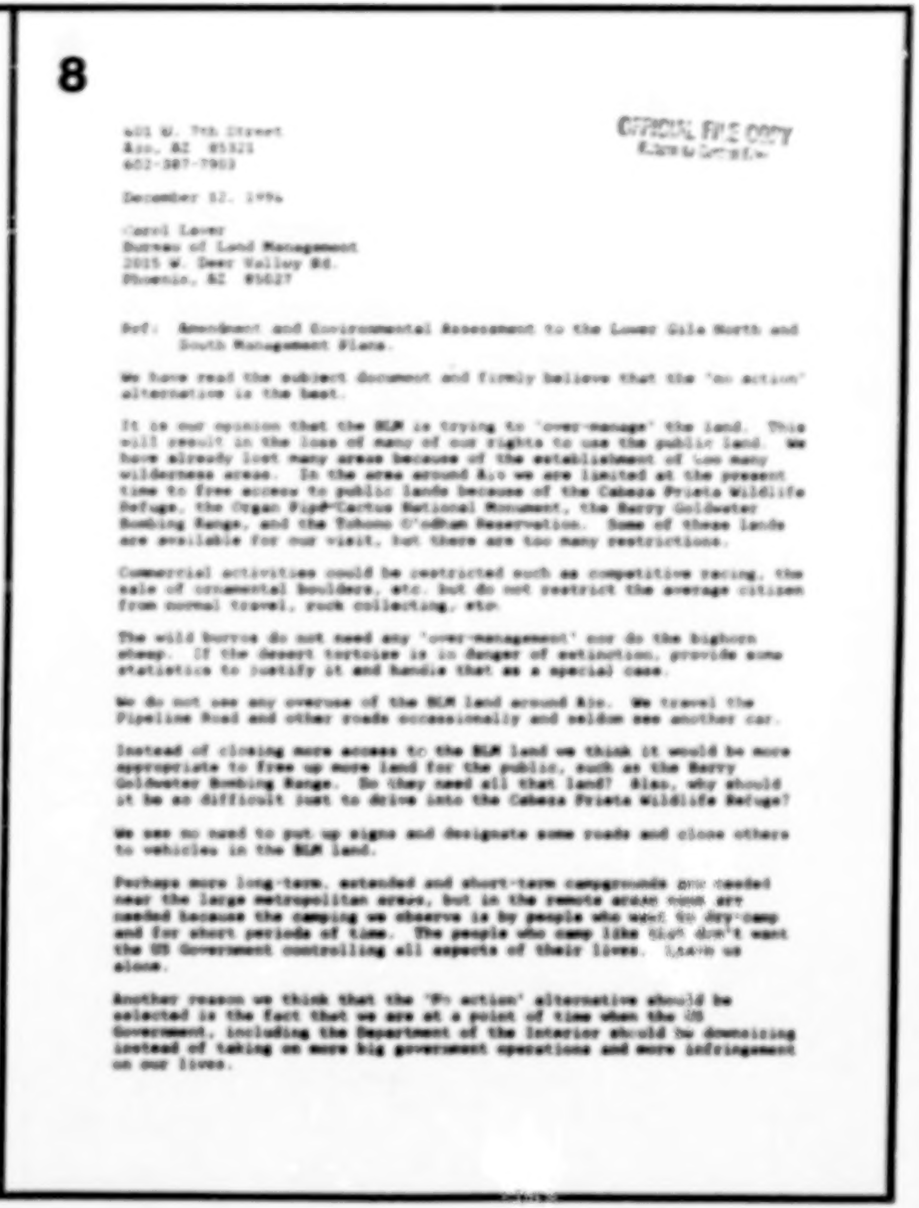

8

401 W. 7th Street
Ajo, AZ 85321
602-387-7903

OFFICIAL FILE COPY

December 12, 1994

Carol Laver
Bureau of Land Management
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Ref: Amendment and Environmental Assessment to the Lower Gila North and South Management Plans.

We have read the subject document and firmly believe that the 'no action' alternative is the best.

It is our opinion that the BLM is trying to 'over-manage' the land. This will result in the loss of many of our rights to use the public land. We have already lost many areas because of the establishment of too many wilderness areas. In the area around Ajo we are limited at the present time to free access to public lands because of the Cabeza Prieta Wildlife Refuge, the Organ Pipe Cactus National Monument, the Barry Goldwater Bombing Range, and the Tohono O'odham Reservation. Some of these lands are available for our visit, but there are too many restrictions.

Commercial activities could be restricted such as competitive racing, the sale of ornamental boulders, etc. but do not restrict the average citizen from normal travel, rock collecting, etc.

The wild burros do not need any 'over-management' nor do the bighorn sheep. If the desert tortoise is in danger of extinction, provide some statistics to justify it and handle that as a special case.

We do not see any overuse of the BLM land around Ajo. We travel the Pipeline Road and other roads occasionally and seldom see another car.

Instead of closing more access to the BLM land we think it would be more appropriate to free up more land for the public, such as the Barry Goldwater Bombing Range. Do they need all that land? Also, why should it be so difficult just to drive into the Cabeza Prieta Wildlife Refuge?

We see no need to put up signs and designate some roads and close others to vehicles in the BLM land.

Perhaps more long-term, extended and short-term campgrounds are needed near the large metropolitan areas, but in the remote areas none are needed because the camping we observe is by people who want to dry-camp and for short periods of time. The people who camp like that don't want the US Government controlling all aspects of their lives. Leave us alone.

Another reason we think that the 'No action' alternative should be selected is the fact that we are at a point of time when the US Government, including the Department of the Interior should be downsizing instead of taking on more big government operations and more infringement on our lives.

# 8

Most news media people and politicians said that the November 1994 election results were a mandate for less government out more and less government interference in our lives.

The BLM is proposing more government at a time when the Department of Agriculture is presently cutting its Forest Service operations. The Department of Agriculture is also planning to reduce other agencies that it oversees (Rural Economic and Community Development Services, National Resources Conservative Service, and Consolidated Farm Service Agency) with the savings in billions of dollars.

Also, the new Congress that was elected in November is committed to reduce the size of government and to reduce the meddling of government in our lives. The BLM should be in step with these goals and should not be bucking them.

Sincerely,

David McSherry
Elaine McSherry
Two O'clock Rock Group of Ajo

cc: Rep. Newt Gingrich
Sen. John McCain
Rep. Ed Pastor

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# 9

OFFICIAL FILE COPY
Return to Central Files

December 19, 1994

Carol Laver -Team Leader
Bureau of Land Management, Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Ref: 1610 (026)

Dear Ms. Laver:

Receipt of the draft of the Lower Gila Resource Management Plan is acknowledged.

Having attended several of the Scoping meetings (Gila Bend and Why), I must say your agency has done a good job in identifying and responding to the six planning issues.

GR

My only comment on the draft as presented would be to expand on one issue of OHV use in the BLM areas around Ajo-Why, namely siting of a designated launch site for ultra-light aircraft.

There are a number of qualified ultra-light pilots in the Ajo-Why area, especially in the winter months, who would be most interested in having such a launch area in close proximity to Why.

The nature of ultra-light aircraft requires a level, graded launch/recovery area at least 75' wide and 800' long. The site should be convenient to Why to enable the aircraft to be trailered to protective and secured storage when not in use. Ultra-lights require more stringent protection from wind, dust and sun than conventional aircraft.

Although not a specific issue that requires addressing in the final draft, for your information the airspace above the BLM lands around Ajo-Why underlie the military operations area (MOA) designated Sells Low MOA and Sells 1 MOA (see attached Phoenix Sectional Air Chart). Ultra-light flight operations beneath these MOA's would not conflict with military traffic, an important safety issue.

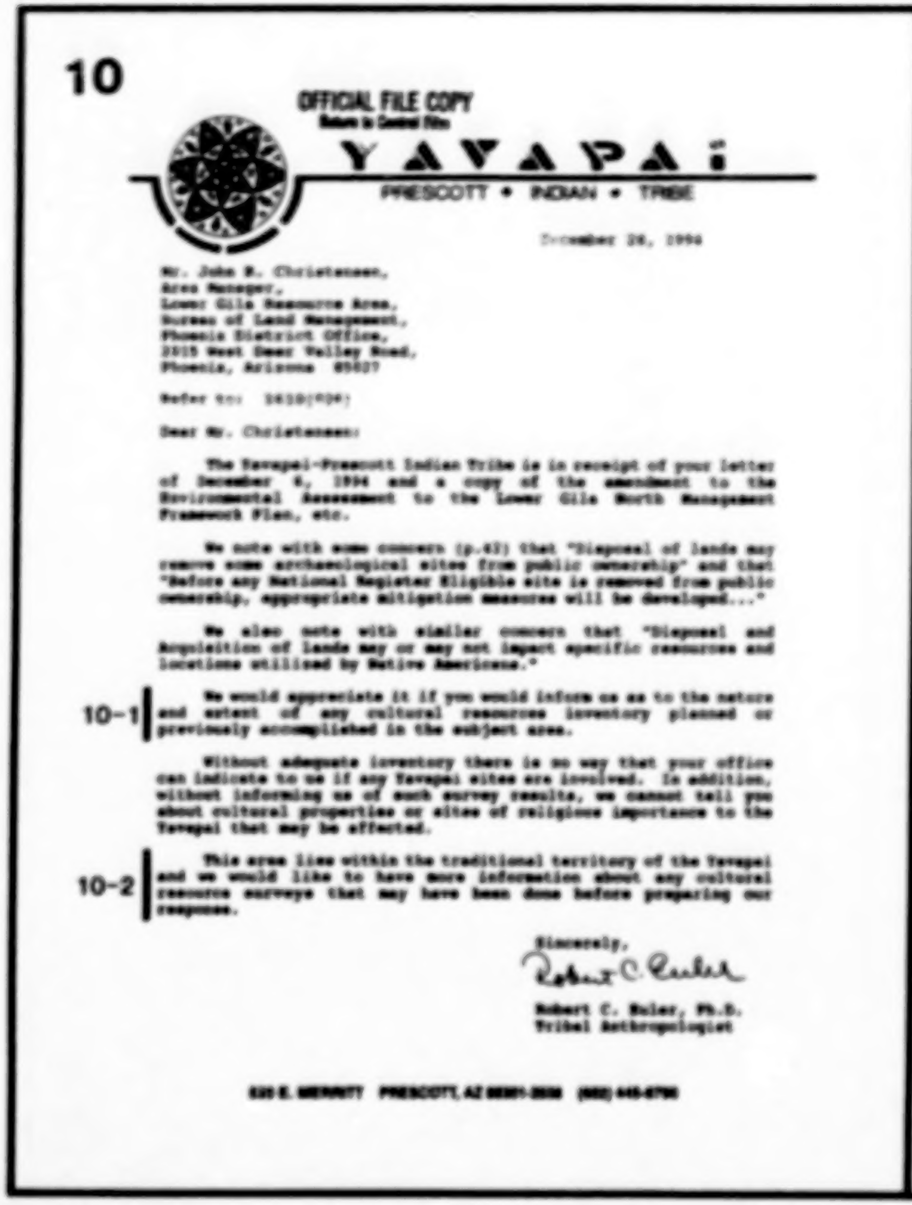
Your consideration of our request would be most appreciated. Ultra-light pilots will attend the open house scheduled for Why on January 10, 1995. We will be glad to answer any questions your agency may have concerning this recreational activity.

Sincerely,

Don Varner
Ajo-Why Ultra-Light Flyers Assn.
P. O. Box 1846
Why, AZ 85321

Attachment is available for review
at the BLM Phoenix district office.

10



OFFICIAL FILE COPY
Return to Central Files

YAVAPAI
PRESCOTT • INDIAN • TRIBE

December 28, 1994

Mr. John R. Christensen,
Area Manager,
Lower Gila Resource Area,
Bureau of Land Management,
Phoenix District Office,
2015 West Deer Valley Road,
Phoenix, Arizona 85027

Refer to: 1610(024)

Dear Mr. Christensen:

The Yavapai-Prescott Indian Tribe is in receipt of your letter of December 6, 1994 and a copy of the amendment to the Environmental Assessment to the Lower Gila North Management Framework Plan, etc.

We note with some concern (p.43) that "Disposal of lands may remove some archaeological sites from public ownership" and that "Before any National Register Eligible site is removed from public ownership, appropriate mitigation measures will be developed..."

We also note with similar concern that "Disposal and Acquisition of lands may or may not impact specific resources and locations utilized by Native Americans."

10-1 We would appreciate it if you would inform us as to the nature and extent of any cultural resources inventory planned or previously accomplished in the subject area.

Without adequate inventory there is no way that your office can indicate to us if any Yavapai sites are involved. In addition, without informing us of such survey results, we cannot tell you about cultural properties or sites of religious importance to the Yavapai that may be affected.

10-2 This area lies within the traditional territory of the Yavapai and we would like to have more information about any cultural resource surveys that may have been done before preparing our response.

Sincerely,

Robert C. Euler

Robert C. Euler, Ph.D.
Tribal Anthropologist

530 E. MERRITT PRESCOTT, AZ 86301-2038 (602) 445-8790

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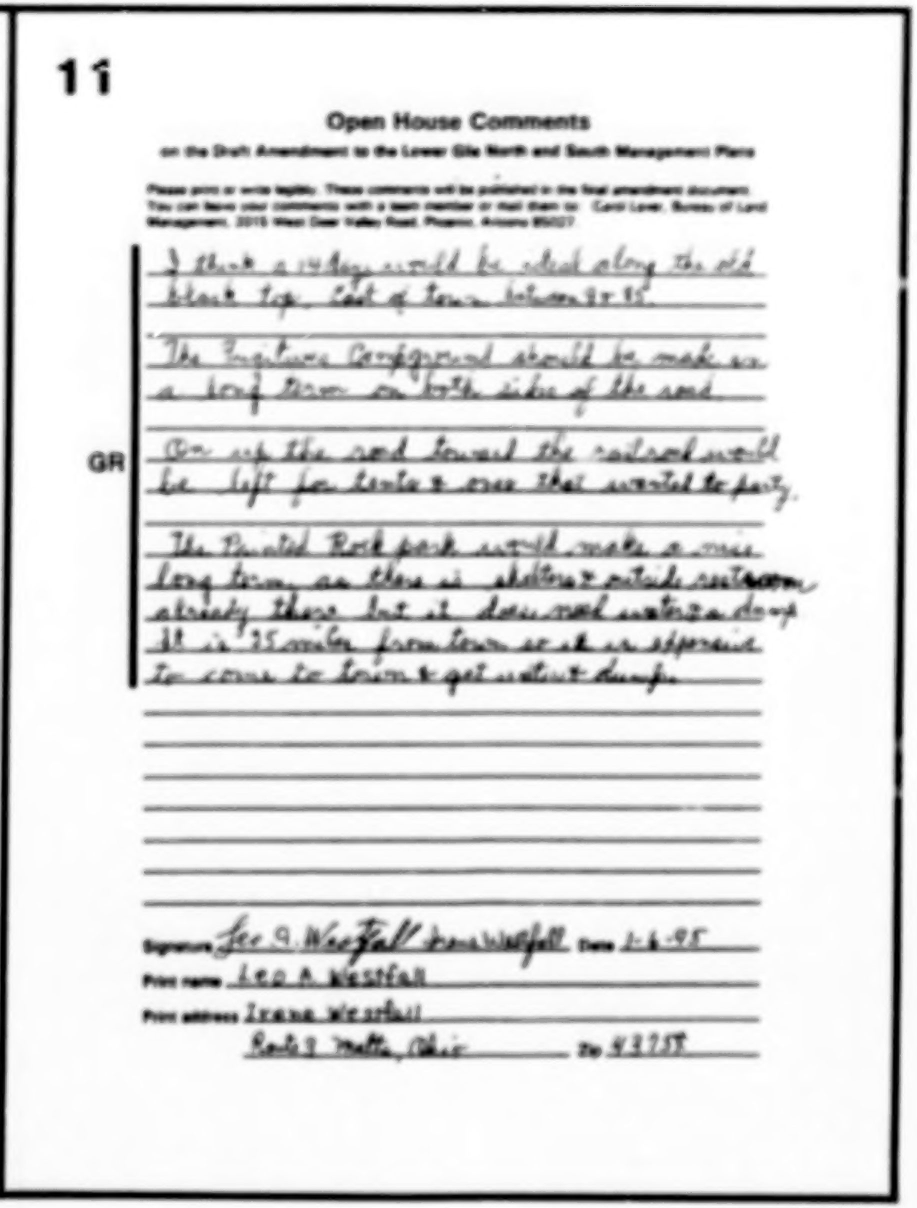
11



## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027

GR

I think a 14 days would be ideal along the old black top. East of town between 9 & 15.

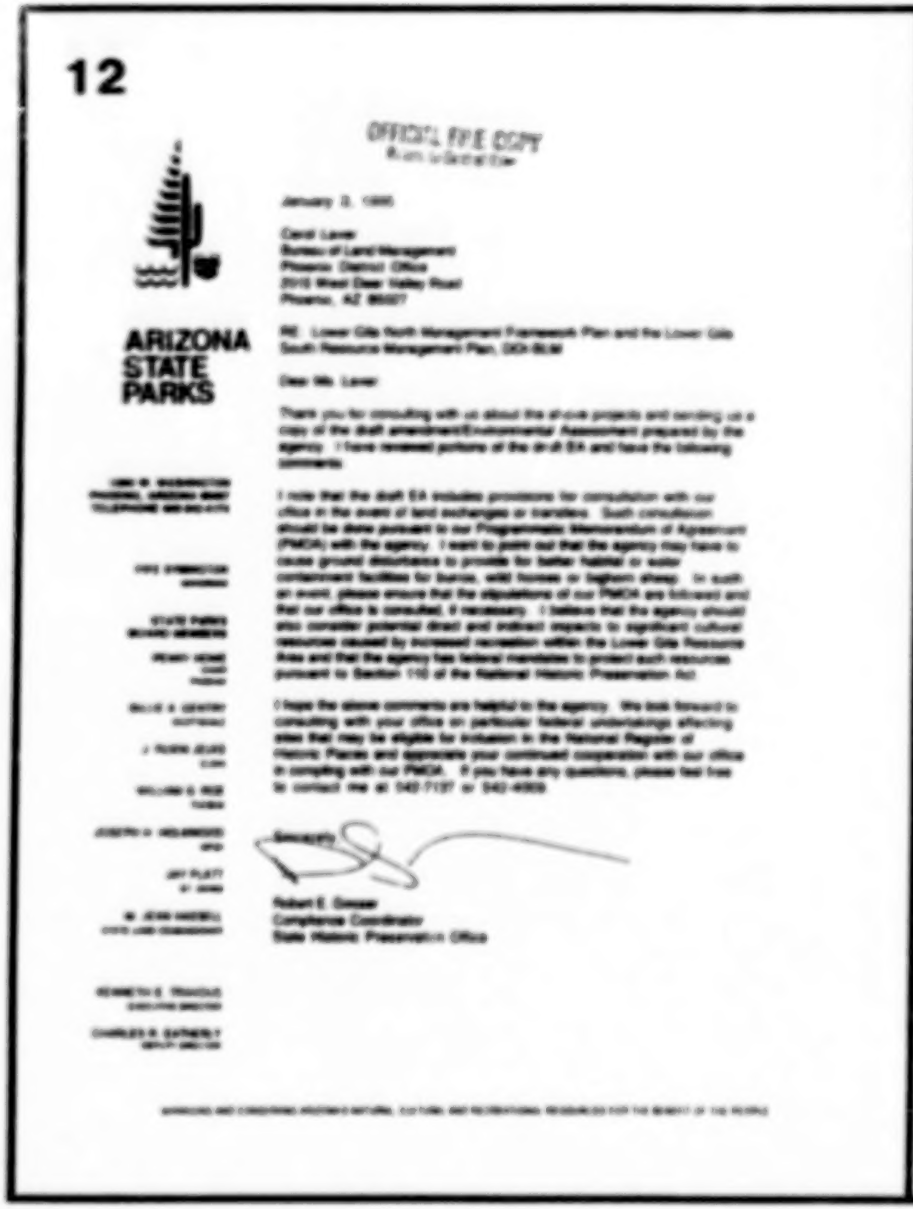
The Fugitive Campground should be made in a long term on both sides of the road.

On up the road toward the railroad would be left for tents & ones that wanted to party.

The Painted Rock park would make a nice long term as there is shelters & outside restroom already there but it does need water & a dump. It is 25 miles from town so it is expensive to come to town & get water & dump.

Signature Leo A. Westfall Irene Westfall Date 1-6-95
Print name Leo A. Westfall
Print address Irene Westfall
Route 9 Malta, Ohio Zip 43758

## 12



OFFICIAL FILE COPY

**ARIZONA STATE PARKS**

January 3, 1995

Carol Laver
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, AZ 85027

RE: Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan, DOI-BLM

Dear Ms. Laver:

Sincerely,

Robert E. Gasser
Compliance Coordinator
State Historic Preservation Office

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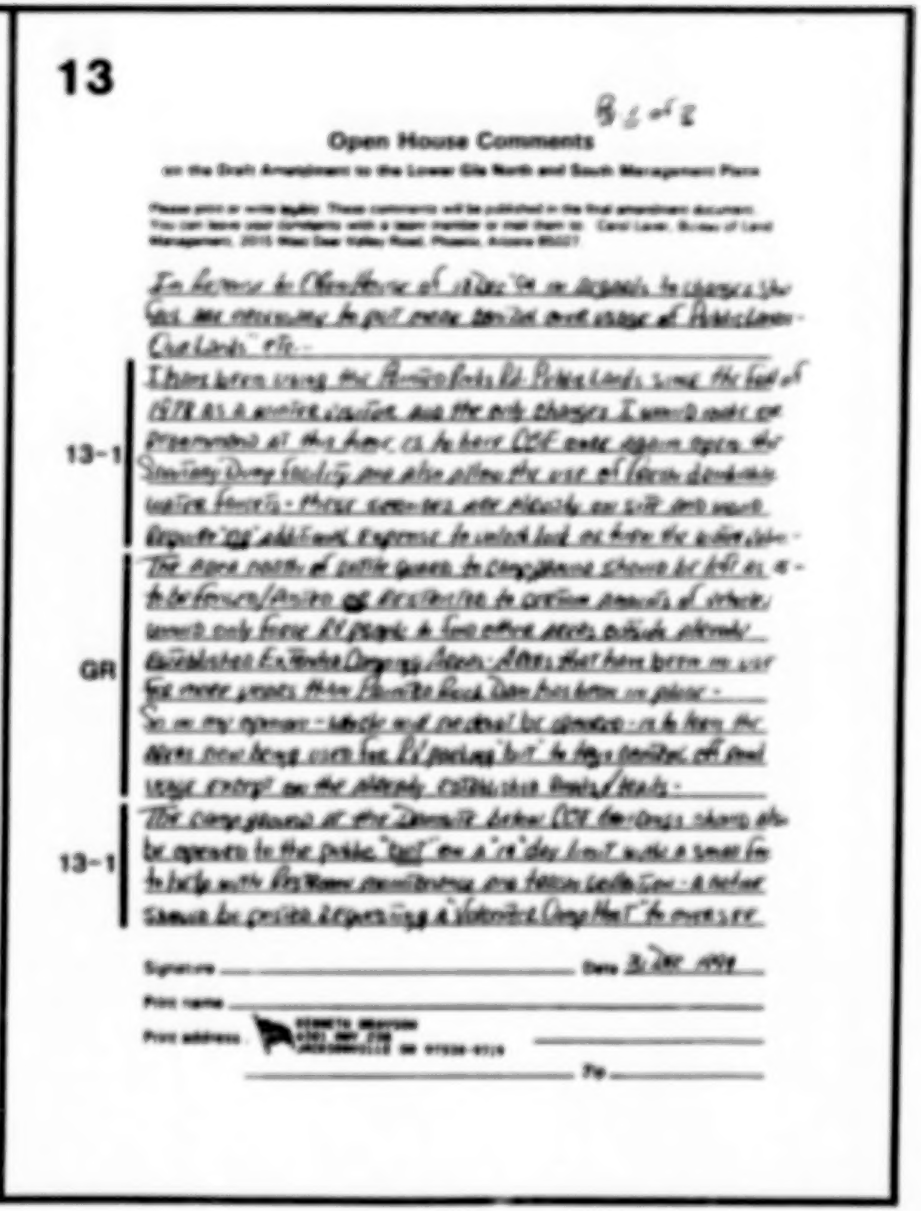
## 13



### Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Laver, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027

13-1

GR

13-1

Signature ______ Date ______

Print name ______

Print address ______

______ Zip ______

**13**

Pg 2 of 2

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Laver, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

13-1 the Above camp plus a "Volunteer Camphost" for the Painted Rock Historic Park" to help maintain those facilities already in place and give or assist visitors with information -

13-2 BLM boundary markers should be posted so areas to be used for Extended Camping and Short Term Camping can be defined so no confusion will exist when numerous weekend campers and/or overnight campers infringe on or into Extended Camping Areas - As of 28 Dec '94 a count of 9 RV campers were using the area from cattle guard/BLM boundary fence?? to the Rocky Point Rd intersection - And in the Painted Rock Historic Park a count of 10 campers - So you can see no problem exists with over use or neglect of land use now or ever with RV-ing winter visitors - Enough said on this subject - So do as you already have planned without benefit of public input -

Signature Kenneth Grayson Date 31 Dec 1994

Print name KENNETH GRAYSON

Print address 6301 HWY 238
JACKSONVILLE OR 97530-9719

Zip

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**14**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Laver, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

Dear Carol;

I am Wrighting to tell you how Much we like the Desert it is so quite here. Nothing bother you. everyone here is so Nice and Considerate we keep our Campsite and Clean we don't Camp to close to each other we have our Camp fires every Night but when it rain we all sit around the fire till [illegible] ~~[illegible]~~ laugh & talk till around 8:00 then we go to our Camper for the Night. Next day it starts all over again. we have a lot of fun here in the Winter time. we would sure hate to lose all that. we are Winter Visitors

I feel we are a big help to the town of Gila Bend With spending our Money for things we Need While we are here. Thank you,

Signature Charley & Dorothy Hester Date 1-4-1995

Print name CHARley+DorothyHester

Print address 3610 LONG Drive
St.ANN MO Zip 63074

## 15

Jan 10 1995

Lower Gila Resource area
B.L.M
Regarding Changes in the above area at Why AZ.

GR 1. Change the 14 day limit to allow longer Camping time. Possibly similar to times allowed in L.T.V.A.

I believe less Environmental will be caused by less movement of large trailers, motorhomes and etc. The vehicles will be moved less if longer Camping is allowed.

Campers will probably take better care of the area as none of us want to camp in a trashy area. The area is currently almost free of cans bottles and blowing trash.

We enjoy camping in this area to watch the wildlife, open areas between camping units and unrestricted walking areas to learn about the plant and animal life around us. It is also close to water, dump sites and shopping areas.

Thank you
Bobby + [illegible] Carnett

P.O. Box 9404
Why AZ 85321

627 N. Tower St
Colo Springs Co 80905

## 16

### Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

I RECOMMEND THAT IF LEASING BLM LAND FOR CATTLE GRAZING IS TO CONTINUE THAT GRAZING FEES BE RAISED TO THE RANCHERS COMPARABLE TO FEES ON THE OPEN MARKET

Signature Ramon [illegible] Date 4/10/95
Print name RAMON [illegible]
Print address 320 [illegible] DRIVE
Arroyo Grande, CA Zip 93420

**17**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Laver, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR We camp on BLM land 2 miles south of Why Az and I would like to see it remain as is for the most part. Also a volunteer host would be nice but not really necessary.

There is some concern with off-road Atv's doing some damage, but not real serious

Signature Carl Machande Date Jan 10, 1995
Print name CARL MACHANDE
Print address 2901 MOTEL DRIVE EAST
Deming NM Zip 88030

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**18**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Laver, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

18-1 Loc - 2 mile Wash South of Why
Proposal - Leave it alone But
Define camping Boundary - Do Not
Restrict Hunting

Signature Robert H Jones Date 10 Jan 95
Print name Robert H Jones
Print address PO Box 9136
Why AZ Zip 85321

**19**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR

I believe a longer stay than 14 days would be beneficial not only to the environment but also to the public. I would be willing to pay a yearly fee for this ~~[illegible]~~ privilege if necessary. I would be against any development in the two [illegible] mile wash south of Why. Let's keep it as natural as possible.

The laws-Rules & Regulations should be handled within the State or county and not back in Washington DC.

Signature Derrill Ham Date 1/10/95

Print name Derrill Ham

Print address R.R. Box 814 Donnelly Idaho

Zip 83615

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**20**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

GR

① Allow ATV Traffic on Long-Time existing roads, Trails & washes.

② Establish an LTVA immediately S. of (Gunsight) 2-mile wash, (South of Why), like same now exist on other BLM lands in AZ & Calif.

③ Authorize the members of the Ajo-Why Ultralite flying club to establish, on their own initiative & at their own expense, a dirt flying strip apx 1200' x 50', on BLM land adjacent to Why AZ on the west, in conjunction with an existing area-entrance road leading west from Why. It's simply a matter of enlarging (lengthening & widening) the currently existing road.

Signature Ted J T Regan Date 1-10-95

Print name Same As Above

Print address P.O. Box 9806

Why - AZ Zip 85321

**21**

### Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

The land around Ajo is the only land available for the population to enjoy. The take these families out on jaunts, Rock climbing, rock hunting, geology studies, hunting and sitteseeing by the people in that cannot walk. why is the BLM programmed to take these rights away? Leave this area as it is, what little is at least something for us.

Signature Keith R Wilson Date Jan. 10 95
Print name KEITH R WILSON
Print address 241 WEST 4th AVE
AJO AZ Zip 85321

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**22**

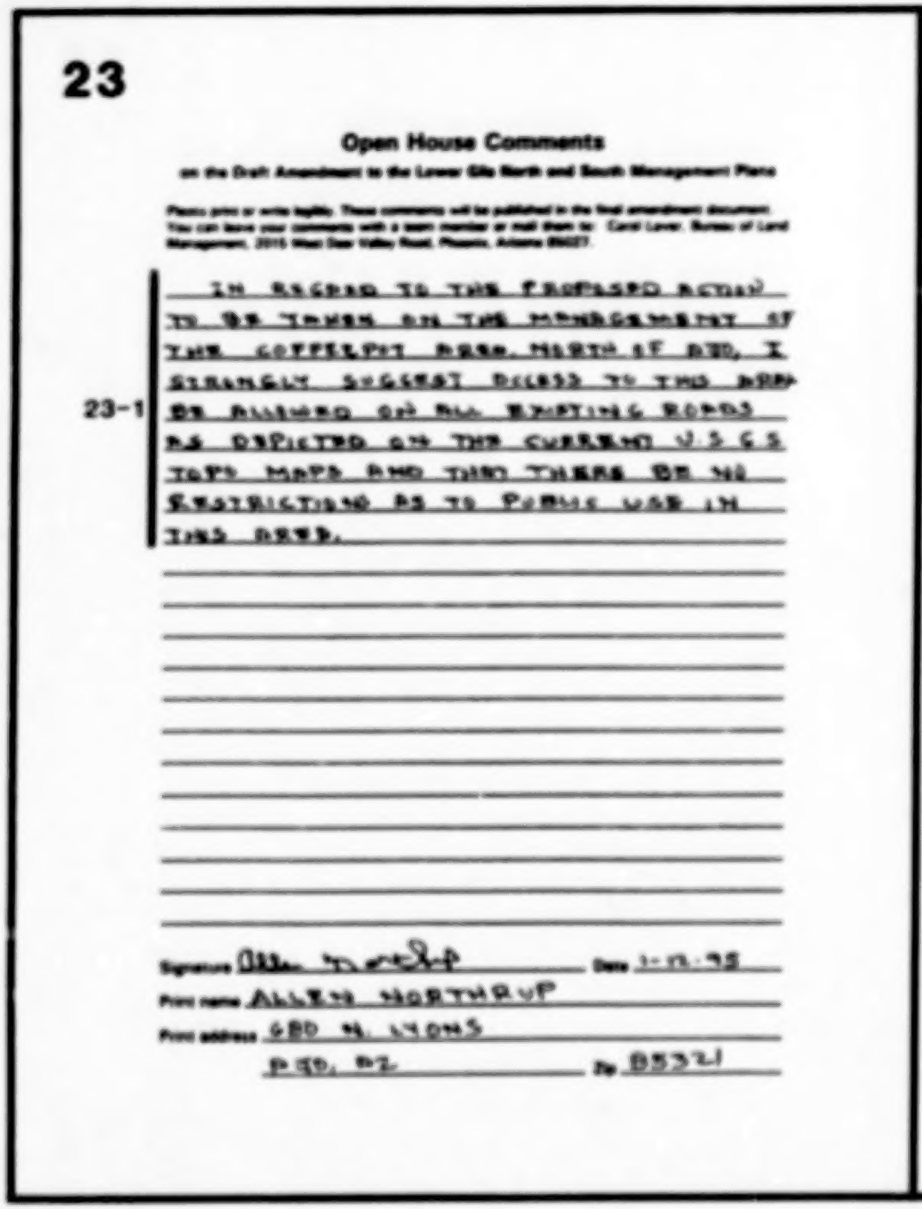
### Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

I DON'T UNDERSTAND WHY SO MUCH EFFORT AND MONEY IS BEING EXPENDED FOR THIS ACTIVITY. (EXAMPLE: ABOUT 10 BLM PEOPLE AT THIS MEETING). THIS IS THE TIME FOR LOWER TAXES, LESS GOVERNMENT, AND LESS INFRIGEMENT IN OUR LIVES. I WOULD LIKE TO SEE THE BLM TAKE A MORATARIUM ON ANY FUTURE CHANGES.

Signature David B. McSherry Date 1-10-95
Print name DAVID B McSHERRY
Print address 401 W. 7TH ST.
AJO, AZ Zip 85321



## 23

### Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

23-1 IN REGARD TO THE PROPOSED ACTION TO BE TAKEN ON THE MANAGEMENT OF THE COPPERPOT AREA NORTH OF AJO, I STRONGLY SUGGEST ACCESS TO THIS AREA BE ALLOWED ON ALL EXISTING ROADS AS DEPICTED ON THE CURRENT U.S.G.S. TOPO MAPS AND THAT THERE BE NO RESTRICTIONS AS TO PUBLIC USE IN THIS AREA.

Signature Allen Northrup Date 1-13-95

Print name ALLEN NORTHRUP

Print address 680 N. LYONS

AJO, AZ Zip 85321

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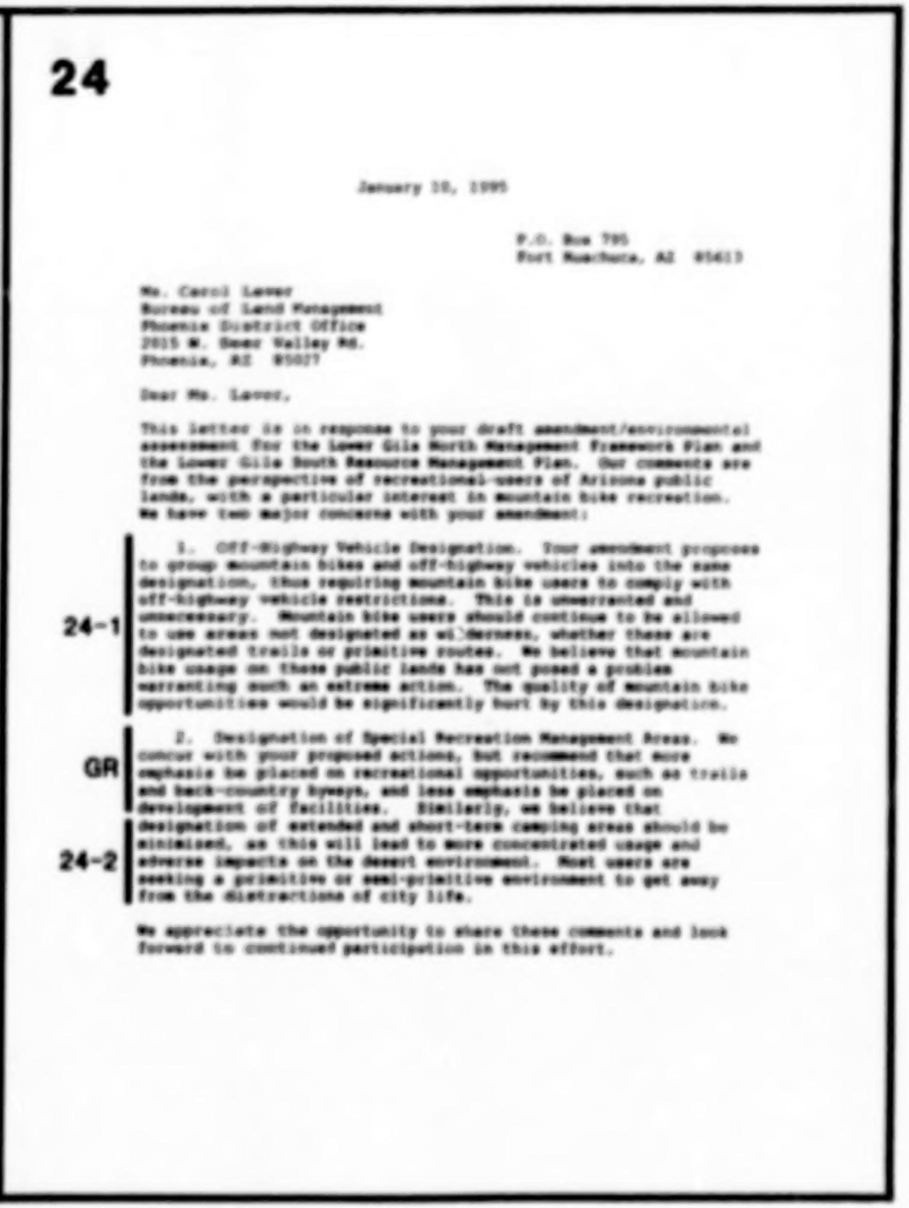


## 24

January 10, 1995

P.O. Box 795
Fort Huachuca, AZ 85613

Ms. Carol Lever
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

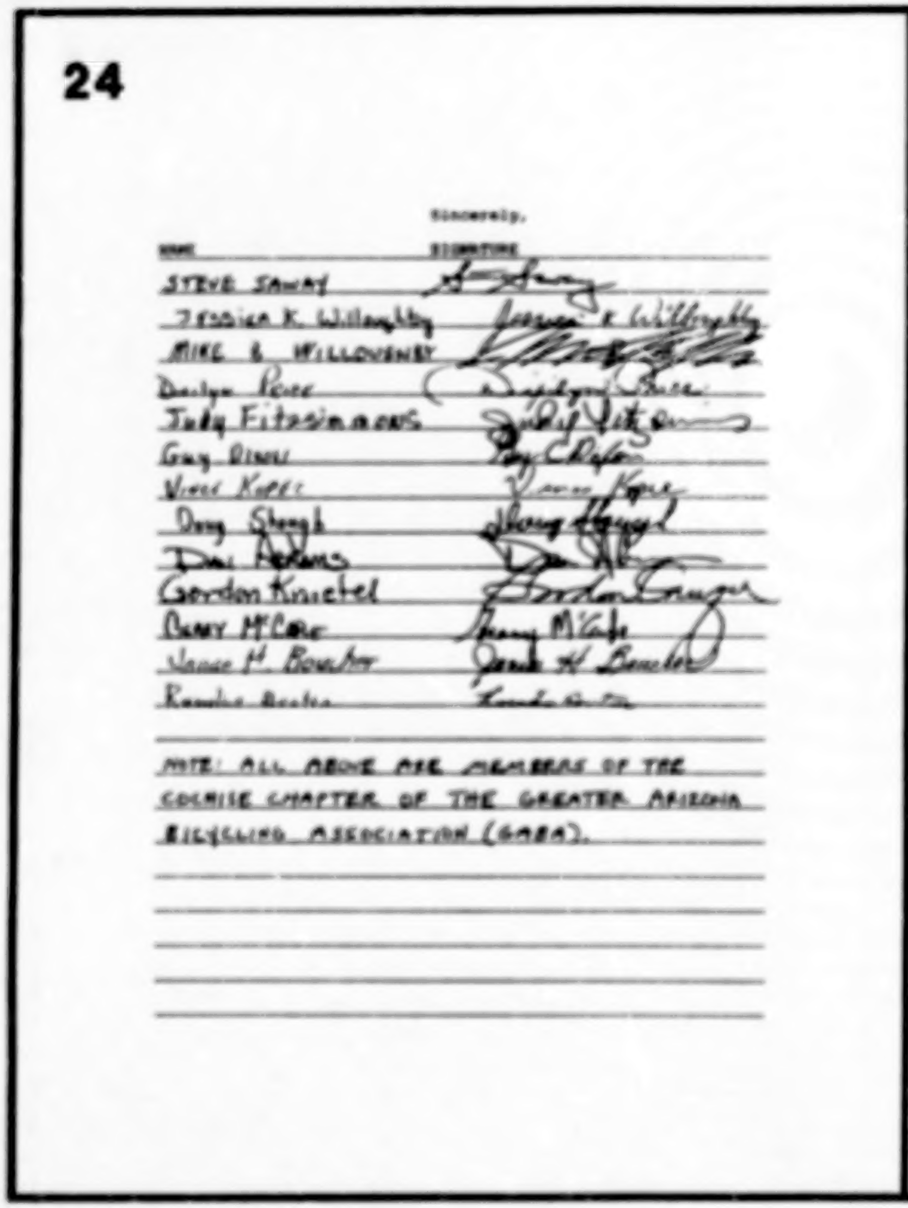
Dear Ms. Lever,

This letter is in response to your draft amendment/environmental assessment for the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan. Our comments are from the perspective of recreational-users of Arizona public lands, with a particular interest in mountain bike recreation. We have two major concerns with your amendment:

24-1 1. Off-Highway Vehicle Designation. Your amendment proposes to group mountain bikes and off-highway vehicles into the same designation, thus requiring mountain bike users to comply with off-highway vehicle restrictions. This is unwarranted and unnecessary. Mountain bike users should continue to be allowed to use areas not designated as wilderness, whether these are designated trails or primitive routes. We believe that mountain bike usage on these public lands has not posed a problem warranting such an extreme action. The quality of mountain bike opportunities would be significantly hurt by this designation.

GR 2. Designation of Special Recreation Management Areas. We concur with your proposed actions, but recommend that more emphasis be placed on recreational opportunities, such as trails and back-country byways, and less emphasis be placed on development of facilities. 24-2 Similarly, we believe that designation of extended and short-term camping areas should be minimized, as this will lead to more concentrated usage and adverse impacts on the desert environment. Most users are seeking a primitive or semi-primitive environment to get away from the distractions of city life.

We appreciate the opportunity to share these comments and look forward to continued participation in this effort.



**24**

Sincerely,

NAME SIGNATURE

STEVE SAWAY

Jessica K. Willoughby

MIKE B. WILLOUGHBY

Darilyn Pierce

Judy Fitzsimmons

Gary Dixon

Vince Kopec

Doug Stough

Dan Adams

Gordon Knietel

Barry McCabe

Janice H. Boucher

Rosalie Bertsch

NOTE: ALL ABOVE ARE MEMBERS OF THE COCHISE CHAPTER OF THE GREATER ARIZONA BICYCLING ASSOCIATION (GABA).

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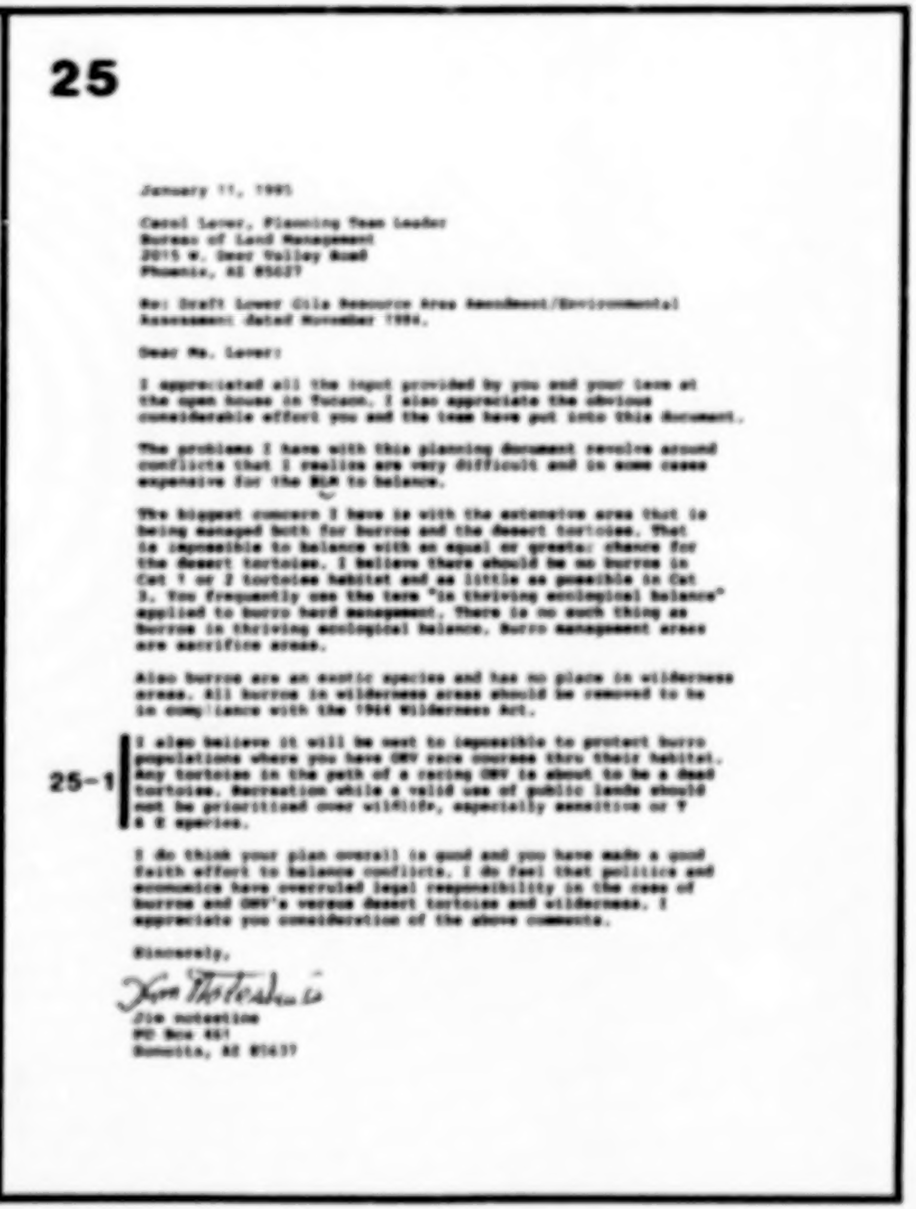


**25**

January 11, 1995

Carol Lever, Planning Team Leader
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, AZ 85027

Re: Draft Lower Gila Resource Area Amendment/Environmental Assessment dated November 1994.

Dear Ms. Lever:

I appreciated all the input provided by you and your team at the open house in Tucson. I also appreciate the obvious considerable effort you and the team have put into this document.

The problems I have with this planning document revolve around conflicts that I realize are very difficult and in some cases expensive for the BLM to balance.

The biggest concern I have is with the extensive area that is being managed both for burros and the desert tortoise. That is impossible to balance with an equal or greater chance for the desert tortoise. I believe there should be no burros in Cat 1 or 2 tortoise habitat and as little as possible in Cat 3. You frequently use the term "in thriving ecological balance" applied to burro herd management. There is no such thing as burros in thriving ecological balance. Burro management areas are sacrifice areas.

Also burros are an exotic species and has no place in wilderness areas. All burros in wilderness areas should be removed to be in compliance with the 1964 Wilderness Act.

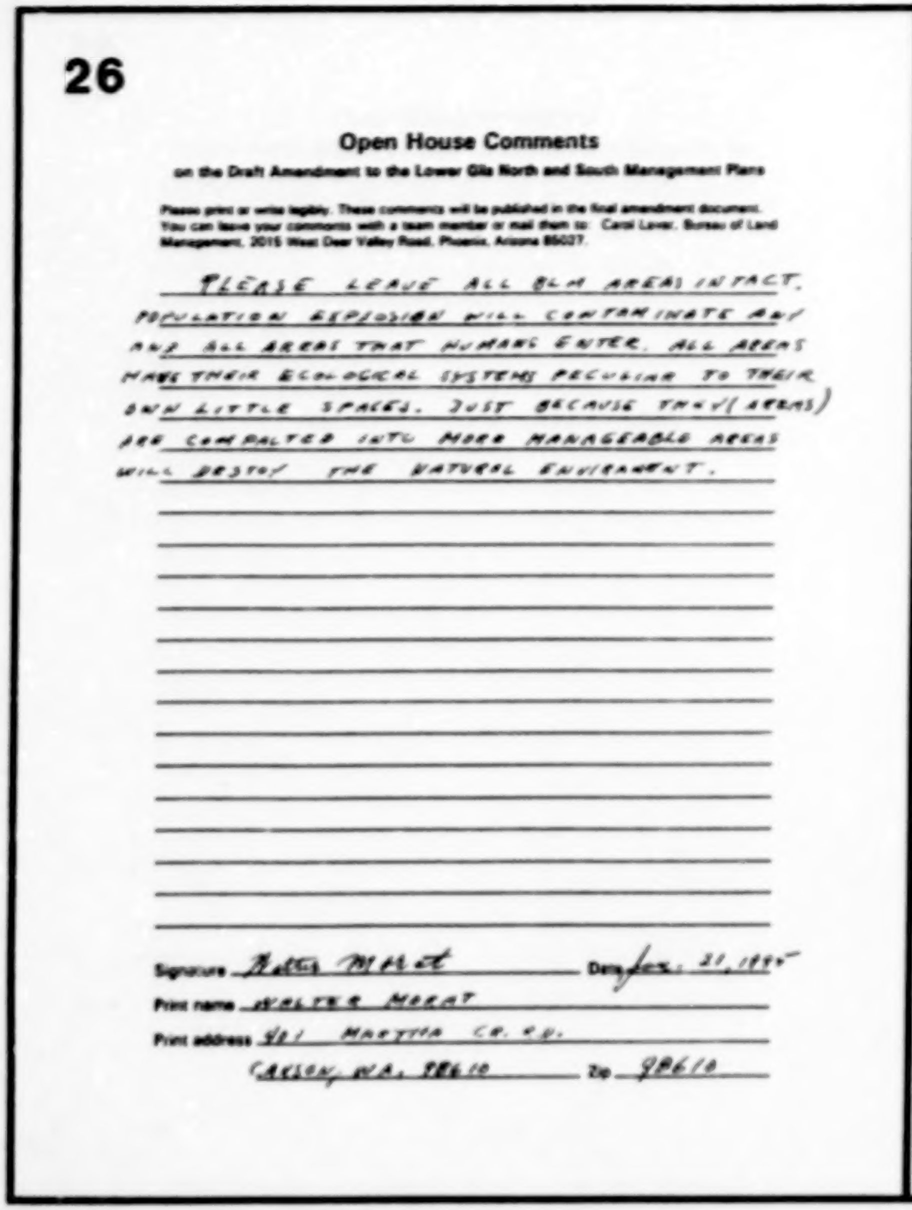
25-1 I also believe it will be next to impossible to protect burro populations where you have OHV race courses thru their habitat. Any tortoise in the path of a racing OHV is about to be a dead tortoise. Recreation while a valid use of public lands should not be prioritized over wildlife, especially sensitive or T & E species.

I do think your plan overall is good and you have made a good faith effort to balance conflicts. I do feel that politics and economics have overruled legal responsibility in the case of burros and OHV's versus desert tortoise and wilderness. I appreciate you consideration of the above comments.

Sincerely,

Jim Notestine

Jim Notestine
PO Box 461
Sonoita, AZ 85637



**26**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

PLEASE LEAVE ALL BLM AREAS INTACT. POPULATION EXPLOSION WILL CONTAMINATE ANY AND ALL AREAS THAT HUMANS ENTER. ALL AREAS HAVE THEIR ECOLOGICAL SYSTEMS PECULIAR TO THEIR OWN LITTLE SPACES. JUST BECAUSE THEY (AREAS) ARE COMPACTED INTO MORE MANAGEABLE AREAS WILL DESTOY THE NATURAL ENVIRONMENT.

Signature Walter Morat Date Jan. 21, 1995

Print name WALTER MORAT

Print address 401 MARTTILA CO. RD.

CARSON, WA. 98610 Zip 98610

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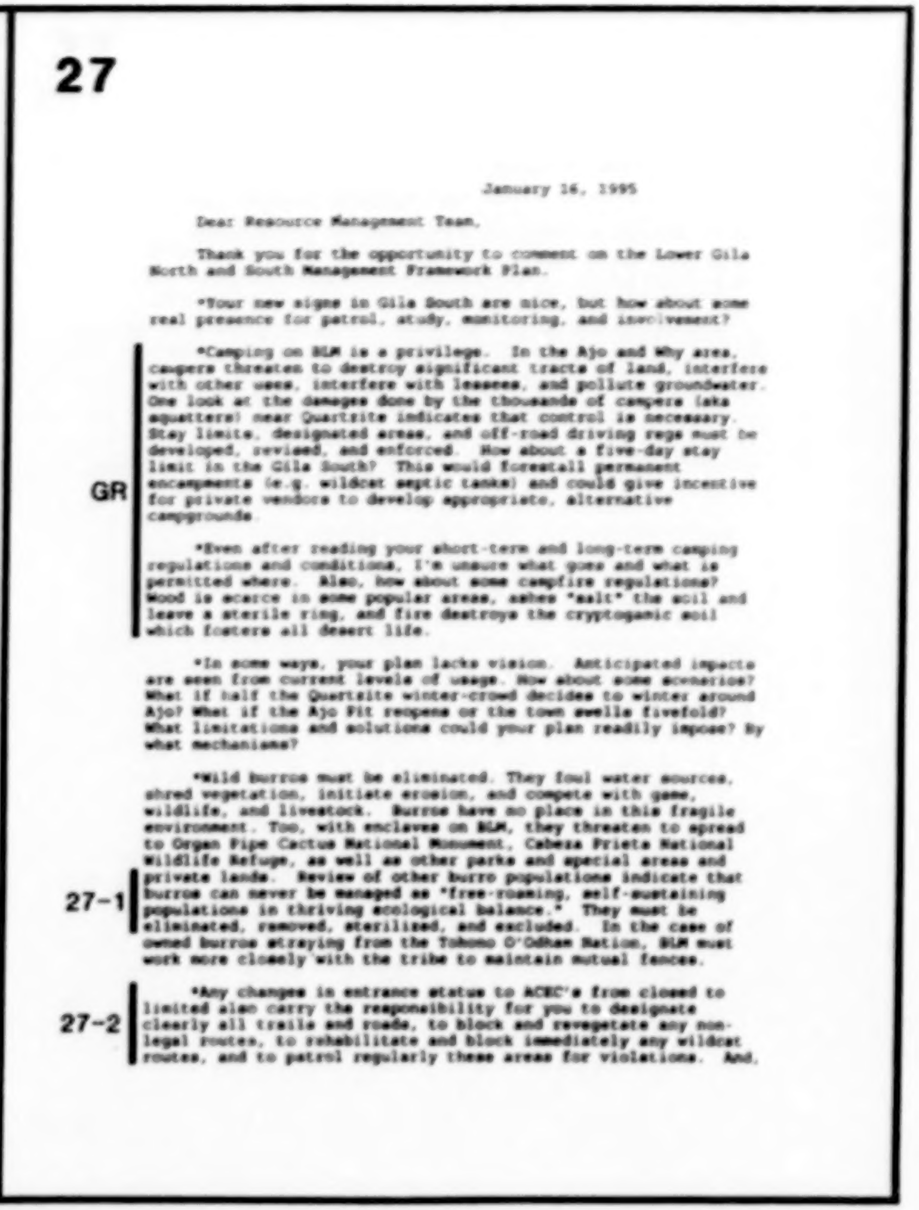

**27**

January 16, 1995

Dear Resource Management Team,

Thank you for the opportunity to comment on the Lower Gila North and South Management Framework Plan.

•Your new signs in Gila South are nice, but how about some real presence for patrol, study, monitoring, and involvement?

GR •Camping on BLM is a privilege. In the Ajo and Why area, campers threaten to destroy significant tracts of land, interfere with other uses, interfere with lessees, and pollute groundwater. One look at the damages done by the thousands of campers (aka squatters) near Quartzite indicates that control is necessary. Stay limits, designated areas, and off-road driving regs must be developed, reviewed, and enforced. How about a five-day stay limit in the Gila South? This would forestall permanent encampments (e.g. wildcat septic tanks) and could give incentive for private vendors to develop appropriate, alternative campgrounds.

•Even after reading your short-term and long-term camping regulations and conditions, I'm unsure what goes and what is permitted where. Also, how about some campfire regulations? Wood is scarce in some popular areas, ashes "salt" the soil and leave a sterile ring, and fire destroys the cryptogamic soil which fosters all desert life.

•In some ways, your plan lacks vision. Anticipated impacts are seen from current levels of usage. How about some scenarios? What if half the Quartzite winter-crowd decides to winter around Ajo? What if the Ajo Pit reopens or the town swells fivefold? What limitations and solutions could your plan readily impose? By what mechanisms?

•Wild burros must be eliminated. They foul water sources, shred vegetation, initiate erosion, and compete with game, wildlife, and livestock. Burros have no place in this fragile environment. Too, with enclaves on BLM, they threaten to spread to Organ Pipe Cactus National Monument, Cabeza Prieta National Wildlife Refuge, as well as other parks and special areas and private lands. 27-1 Review of other burro populations indicate that burros can never be managed as "free-roaming, self-sustaining populations in thriving ecological balance." They must be eliminated, removed, sterilized, and excluded. In the case of owned burros straying from the Tohono O'Odham Nation, BLM must work more closely with the tribe to maintain mutual fences.

27-2 •Any changes in entrance status to ACEC's from closed to limited also carry the responsibility for you to designate clearly all trails and roads, to block and revegetate any non-legal routes, to rehabilitate and block immediately any wildcat routes, and to patrol regularly these areas for violations. And,

## 27

27-2 If the opening to vehicles leads to degradation, can the plan change or their access be revoked?

Perhaps you could create ORV driving areas on some of that land you're so eager to dispose. ORV driving is not compatible with multiple and sustainable use. Giving ORV riders special sacrifice areas may warrant your review.

27-3 Also, washes and arroyos should count as riparian corridors, not as vehicle trails and roads. Vehicle tracks in washes compact soil and reduce percolation, encourage erosion of both banks and bottom, and destroy plant roots.

27-4 *Detailed descriptions of disposable lands should be available to the public as part of your plan. Why are they unneeded? What is their character? How could their disposal affect the uses or values of adjacent private and public lands?

27-5 In your rush to dispose of lands, why not also return mineral rights to all private landholders within your management areas?

*Your prescriptions for the Three Rivers Riparian ACEC are well taken and should be implemented.

*Cultural resources deserve additional active and passive protection.

*Keep BLM lands under BLM control. These are public lands belonging to all Americans.

*Yes, the augmentation of desert bighorn on a case-by-case basis is laudable. Unfortunately, it sidetracks your policy away from more pressing issues of sheep travel corridors, competition from livestock, human encroachment, habitat degradation, and the effects of transplanted stock on indigenous bands. Further, until the reasons are determined for bighorn decline or absence in a given area, transplantation would seem foolhardy.

27-6 Also, why do Sonoran pronghorn not appear in your management plan (except in Table 1)?

*Bottom-line: keep things primitive or semi-primitive. Prevent the land from being overrun. Manage to show that you care what the land is in fifty years.

Thank you.

Bill Broyles

Bill Broyles
5501 North Maria
Tucson, Arizona 85704

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## 28

1408 FLOYD RD.
SPRINGDALE, ARK. 72762
January 16, 1995

Carol Lauer
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Ms. Lauer:

I'm taking this opportunity to comment on the Draft of the Lower Gila Resource Area Amendment/Environmental Assessment to the Management Framework Plan and South Resource Management Plan. I was raised in southern Arizona and now spend several months a year there. I am most familiar with the Lower Gila South Area.

I've studied the booklet dated November 1994 and visited the staff members open house at [illegible], Arizona, in January. I was not involved in the earlier scoping phase, as I did not hear about it. My comments are keyed to the alternatives listed in the draft.

Lands. I'm pleased to see the proposal to acquire 91,000 acres and dispose of

45,000 outlying parcels. However, I would dispose of properties only by transfer with private and state entities and not by outright sale. I believe that reflects your plans as well.

28-1 Also, I do recommend against disposing of land immediately adjacent to I-8 on the north side of I-8 east of the intersection with Route 94. The section of I-8 from about the Crestwood Road on west to [illegible] is a very scenic corridor; and the proposed disposal of lands would destroy about 5 or 6 miles of that corridor, i.e., such action would destroy scenic values which are stressed in the Federal Land Policy and Management Act.

I commend you for the proposed change that would make eligible for acquisition all the parcels in the [illegible] Valley area east of the [illegible] Jacumba Mountain Wilderness Area. These lands are important in retaining the scenic and natural character of the area.

Wildlife. I would support the proposals regarding desert tortoise, wild horses and burros, and bighorn sheep. I

particularly endorse proposals designed to assist bighorn sheep.

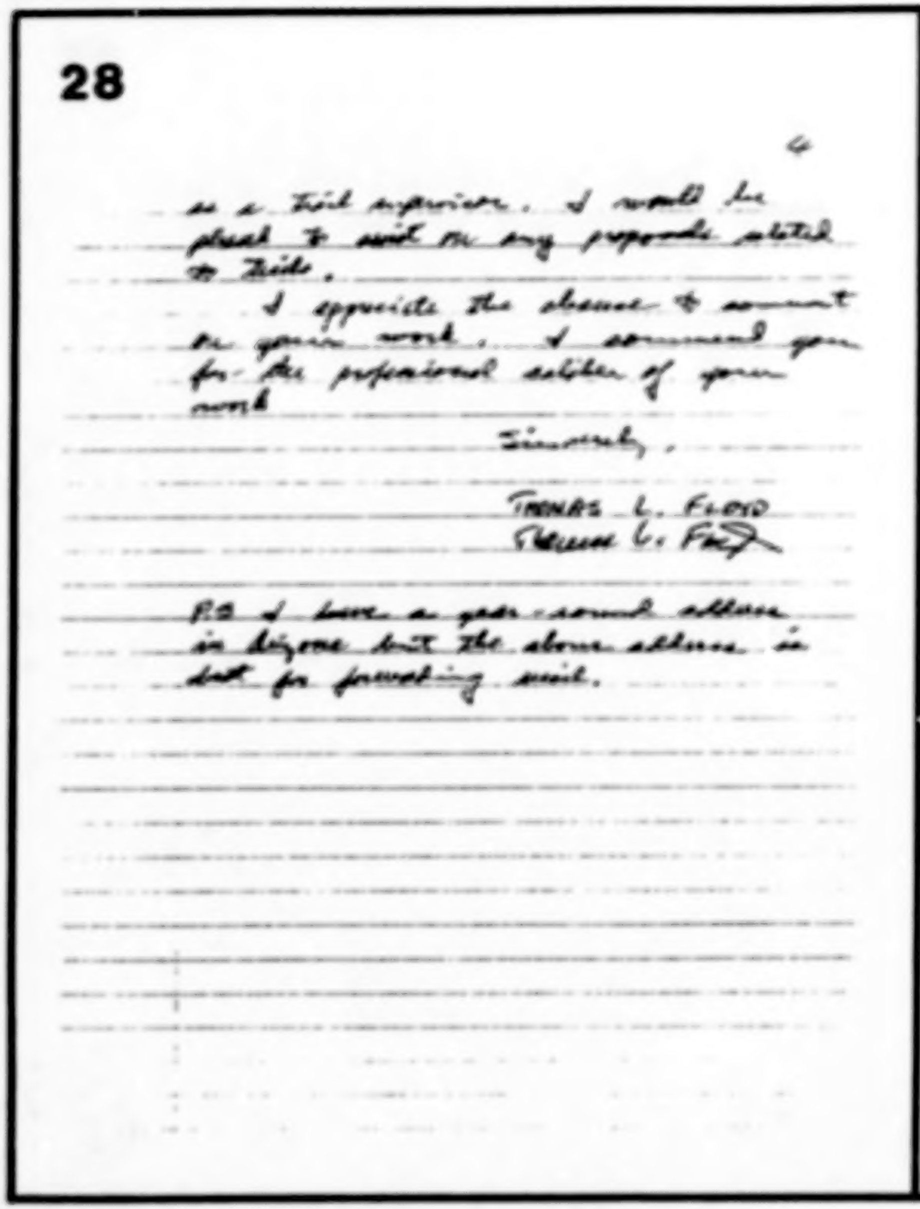
Recreation. I support the change proposed to limit off-highway vehicle use to existing and/or designated roads and trails. This is particularly important at this time, as misuse is beginning to get out of hand in some areas.

I also support your proposal to establish four special recreation management areas, and I assume the public will have an opportunity to comment on the details when they are developed.

I particularly support the plans for long-term, extended, short-term, and fourteen-day camping areas. The current fourteen-day guidelines only serve to impact the areas as people are constantly on the move.

Oil and Gas Development. Oil and gas exploration and development would be in line with national priorities. I hope this can be managed to assure minimum disturbance of other resources and scenic values.

On another subject, I am on the Advisory Board of the American Hiking Society and have a great deal of experience



**28**

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as a trail supervisor. I would be pleased to assist on any proposals related to trails.

I appreciate the chance to comment on your work. I commend you for the professional caliber of your work.

Sincerely,

THOMAS L. FLOYD
Thomas L. Floyd

PS I have a year-round address in Arizona but the above address is best for forwarding mail.

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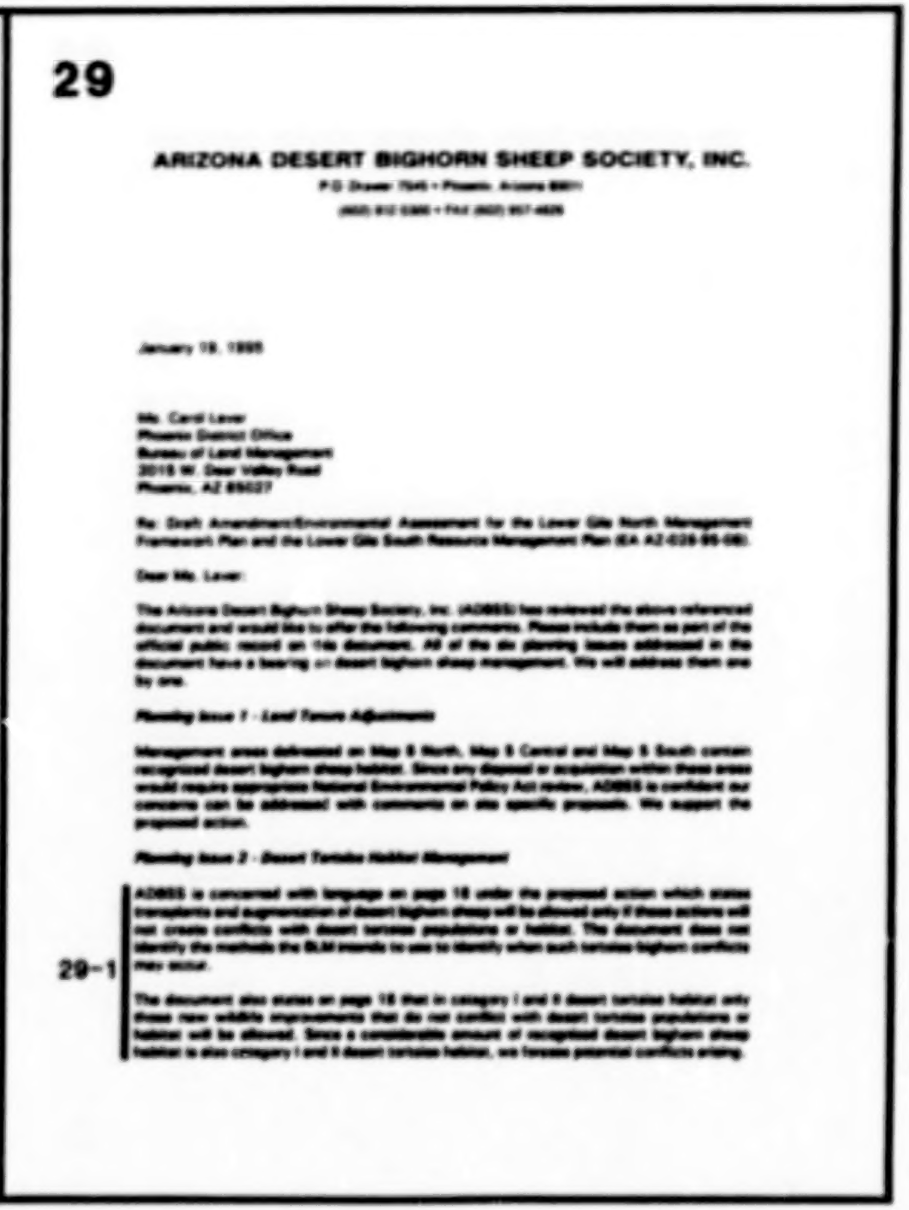


**29**

ARIZONA DESERT BIGHORN SHEEP SOCIETY, INC.
P.O. Drawer [illegible] • Phoenix, Arizona [illegible]
[illegible] • FAX [illegible]

January 19, 1995

Ms. Carol Lever
Phoenix District Office
Bureau of Land Management
2015 W. Deer Valley Road
Phoenix, AZ 85027

Re: Draft Amendment/Environmental Assessment for the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan (EA AZ-026-95-08).

Dear Ms. Lever:

The Arizona Desert Bighorn Sheep Society, Inc. (ADBSS) has reviewed the above referenced document and would like to offer the following comments. Please include them as part of the official public record on this document. All of the six planning issues addressed in the document have a bearing on desert bighorn sheep management. We will address them one by one.

*Planning Issue 1 - Land Tenure Adjustments*

Management areas delineated on Map 6 North, Map 6 Central and Map 6 South contain recognized desert bighorn sheep habitat. Since any disposal or acquisition within these areas would require appropriate National Environmental Policy Act review, ADBSS is confident our concerns can be addressed with comments on site specific proposals. We support the proposed action.

*Planning Issue 2 - Desert Tortoise Habitat Management*

29-1 ADBSS is concerned with language on page 16 under the proposed action which states transplants and augmentation of desert bighorn sheep will be allowed only if these actions will not create conflicts with desert tortoise populations or habitat. The document does not identify the methods the BLM intends to use to identify when such tortoise-bighorn conflicts may occur.

The document also states on page 16 that in category I and II desert tortoise habitat only those new wildlife improvements that do not conflict with desert tortoise populations or habitat will be allowed. Since a considerable amount of recognized desert bighorn sheep habitat is also category I and II desert tortoise habitat, we foresee potential conflicts arising.

**29**

Page 2

29-1 Since the Sonoran desert tortoise inhabits the lower foothills in these areas and desert bighorn sheep inhabit the steeper, more rugged terrain there should not be much conflict. The document does not identify the methods the BLM intends to use to identify when new wildlife improvements in category I and II desert tortoise habitat may conflict with desert tortoise populations or habitat.

ADBSS cannot support the proposed action because it is not clear to us how conflicts will be determined and what mitigation measures the BLM will use to reduce the conflict. We do not want to see desert bighorn sheep transplants, augmentations or water improvements cancelled because of conflicts with desert tortoises. We recommend you explain your conflict identification and resolution procedures as part of this proposed management action.

*Planning Issue 3 - Desert Bighorn Sheep Reestablishment and Augmentation*

Page 18 of the document references the BLM Manual 1745 in terms of clearly identifying desired population targets or objectives and anticipated distribution of the proposed species. It also states the BLM Resource Area in cooperation with the Game and Fish Department will establish or bolster bighorn sheep populations to assist the species in reaching its "natural potential." This is contingent on no resource conflicts or the ability to resolve those resource conflicts.

ADBSS requests the Game and Fish Department, as the species managers acknowledged in the BLM - Game and Fish Department Memorandum of Understanding, take the lead in identifying desired population targets and anticipated distribution of the proposed species.

29-2 We note the term "natural potential" is not identified in the glossary. We also note the absence of any criteria the cooperating agencies will use to determine when the natural potential of an area is reached. We suggest the addition of both this definition and these criteria to the final document.

29-1 ADBSS is concerned that a reintroduction or augmentation may not be allowed where resource conflicts with other uses and resources occur. We are concerned conflicts may be a mere perception in the mind of an interested public, or even an agency resource specialist, and would not hold up under a thorough evaluation of project specifics. Based on a recent experience in the Kingman Resource Area with the cancellation of a bighorn sheep augmentation, we are sensitive to how a perceived conflict can prevent a worthwhile project. We ask the BLM to identify the methods the BLM intends to use to identify when reintroduction or augmentation of desert bighorn sheep may conflict with other uses and resources and what mitigation procedures the BLM will use to reduce the conflict.

While ADBSS supports the concept of desert bighorn sheep reintroduction and augmentation into suitable habitat in the Lower Gila Resource Area we cannot support the proposed action as written. We request you explain your conflict identification and resolution procedures as part of this proposed management action.

---

**29**

Page 3

*Planning Issue 4 - Wild Horse and Burro Management*

ADBSS realizes the BLM is directed to manage wild horse and burro populations under the auspices of the Wild and Free Roaming Horse and Burro Act of 1971, 43 CFR 4710.4 and most recently Interior Board of Land Appeals decisions. We also realize the proposed action is an attempt to bring BLM's management into conformance with IBLA's decisions that wild burros be managed for the "optimum number" of wild burros in a "thriving natural ecological balance" with other system components. Although we realize this is the direction Congress and the Courts are steering your future management, we do not like it. Thriving natural ecological balance is a nebulous concept. It is not even defined in the document's glossary. 29-3

Due to the ability of wild burros to compete with desert bighorn sheep, we feel the Current Guidance of maintaining an Alamo Lake herd of 200 burros and prescribing zero population management or total removal of wild burros from all other burro herd management areas within the Lower Gila Resource Area best meets the needs of desert bighorn sheep.

29-4 The habitat monitoring called for to establish what constitutes a thriving natural ecological balance, to our knowledge, is directed at perennial vegetation. We submit use by grazing animals, whether they be deer, bighorn sheep, cattle, horses or burros, of annual vegetation does not allow a truly accurate representation when perennial vegetation is the basis for monitoring. Unless consumption of annual vegetation can be factored into the monitoring process no one will be able to accurately determine a thriving natural ecological balance.

ADBSS supports the Current Guidance alternative because it best meets the needs of desert bighorn sheep.

*Planning Issue 5 - Recreation Management*

ADBSS supports the proposed action.

*Planning Issue 6 - Oil and Gas Development*

ADBSS supports the proposed action.

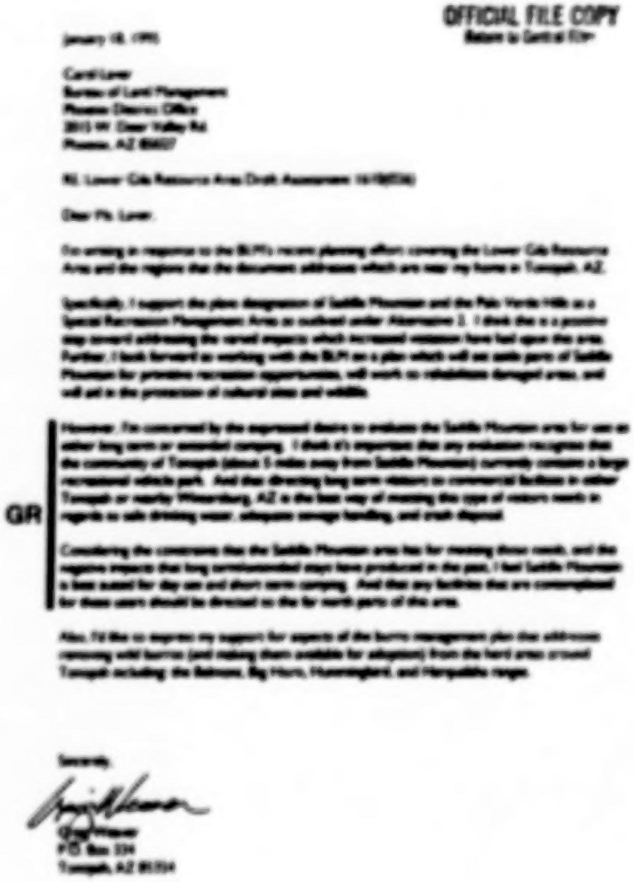
Thank you for the opportunity to comment on this document. We are prepared to address our concerns again in site specific activity planning documents.

Sincerely,

Matt [illegible]

Matt [illegible], President
Arizona Desert Bighorn Sheep Society, Inc.

**30**



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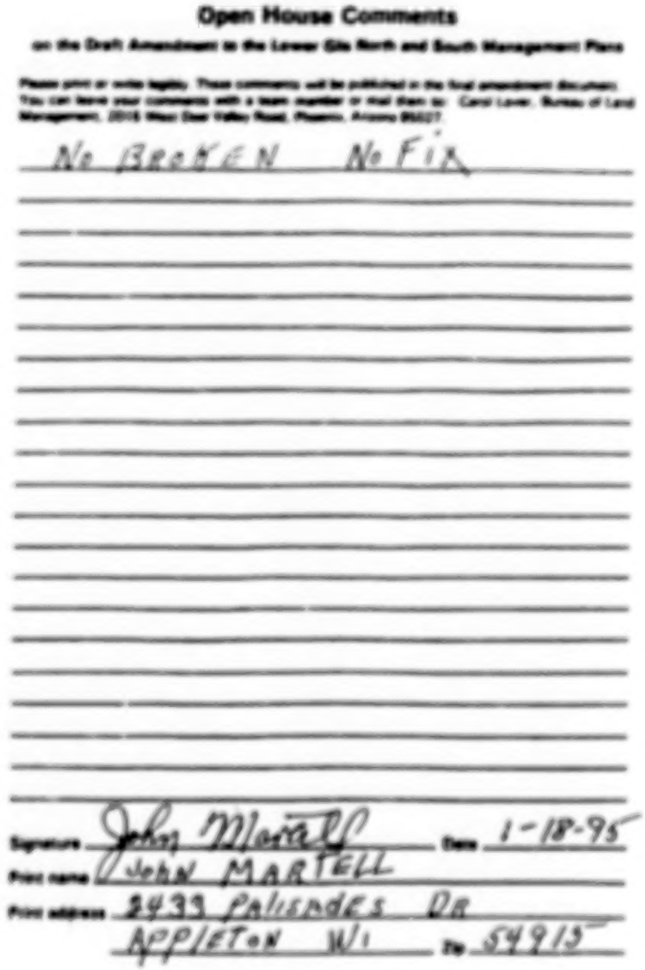


## Open House Comments

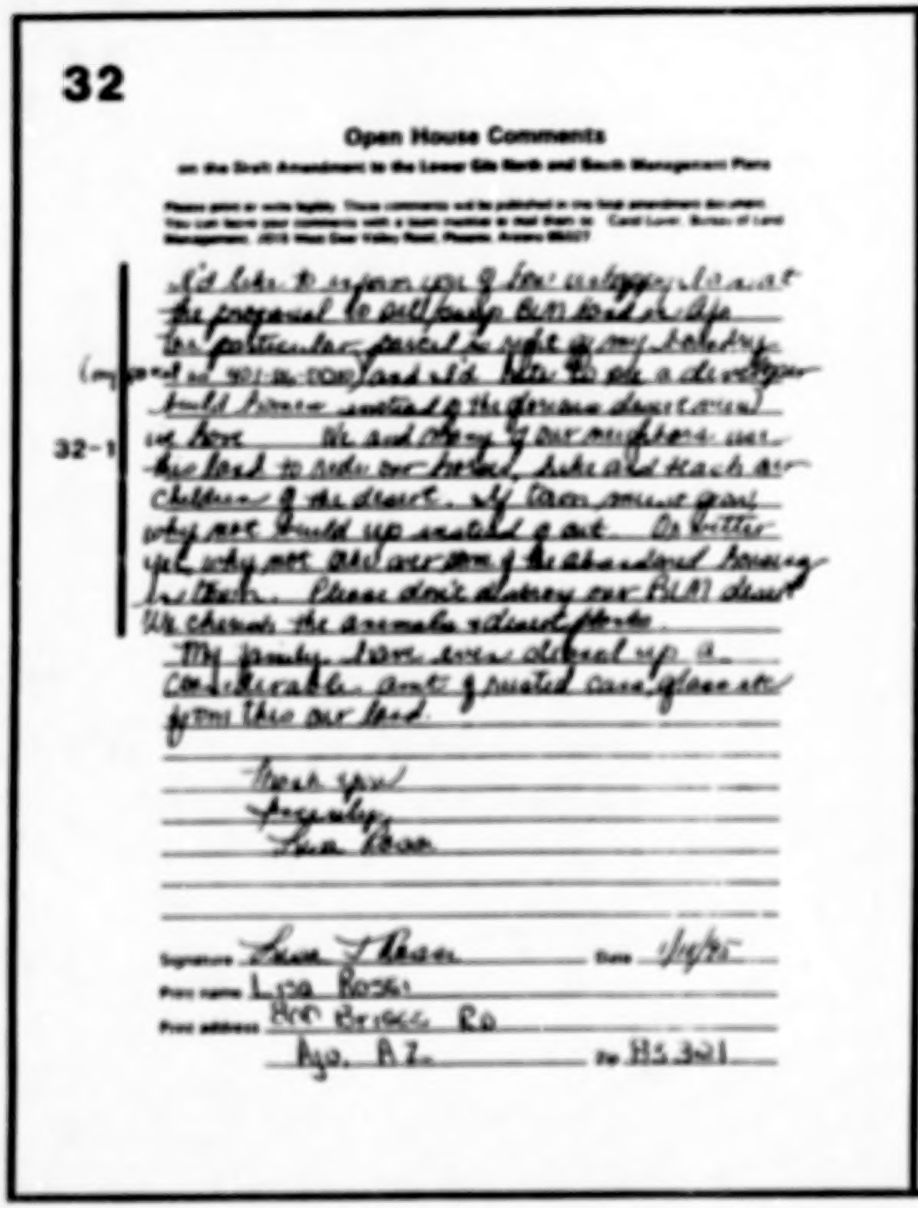
on the Draft Amendment to the Lower Gila North and South Management Plans

No BROKEN No FIX

Signature John Martell Date 1-18-95

Print name JOHN MARTELL

Print address 2433 PALISADES DR
APPLETON WI Zip 54915



**32**

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: [illegible], Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027

32-1 I'd like to inform you of how unhappy I am at the proposal to sell/trade BLM land in Ajo. The particular parcel is right by my property (my parcel is 401-56-[illegible]) and I'd hate to see a developer build homes instead of the gorgeous desert I'm at now. We and many of our neighbors use this land to ride our horses, hike and teach our children of the desert. If town must grow why not build up instead of out. Or better yet, why not take over some of the abandoned housing in town. Please don't destroy our BLM desert. We cherish the animals & desert plants.

My family have even cleaned up a considerable amt of rusted cans, glass etc from this our land.

Thank you
Sincerely,
Lisa Rosen

Signature Lisa J Rosen Date [illegible]
Print name Lisa Rosen
Print address [illegible] Briggs Rd
Ajo, AZ Zip 85321

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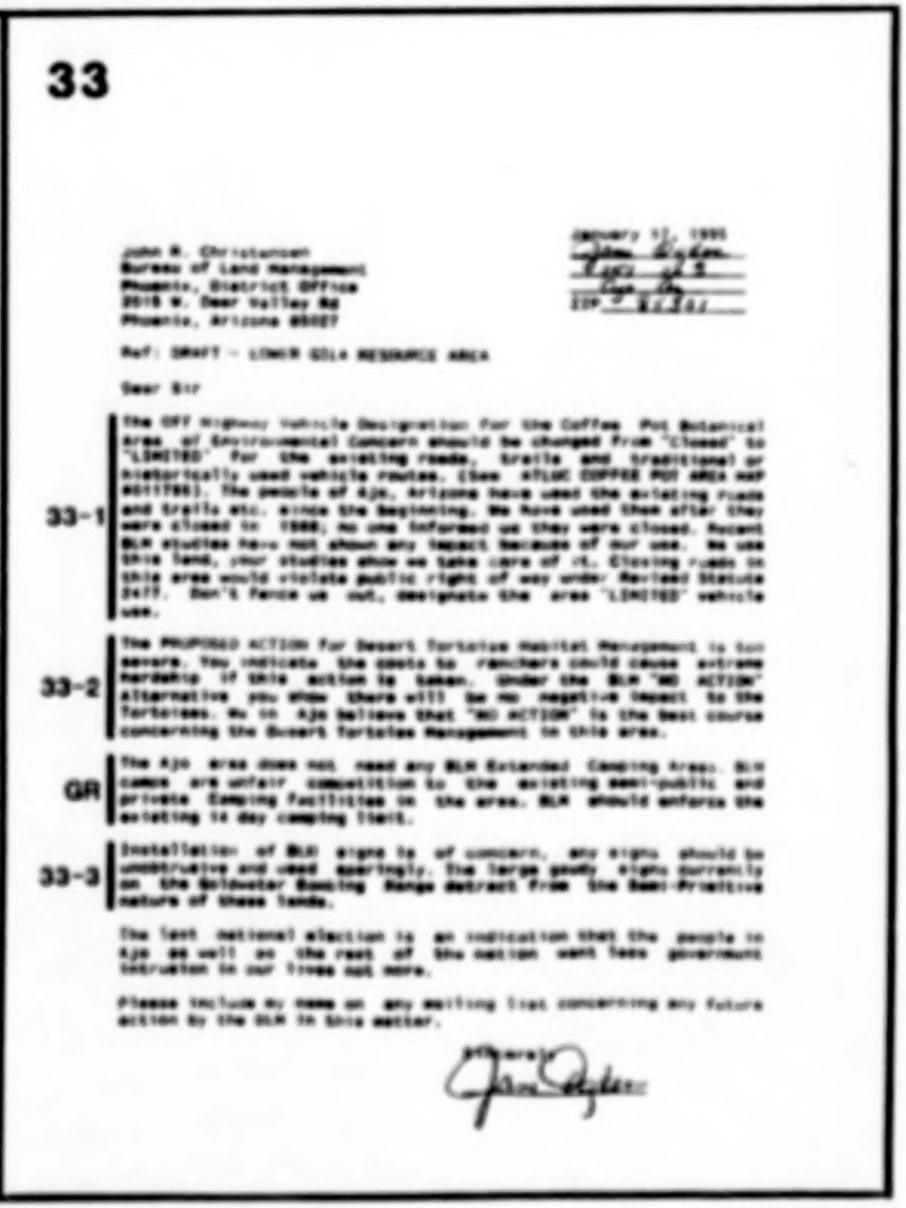


**33**

January 1[illegible], 1995
John Ryder
[illegible]
Ajo Az
ZIP 85321

John R. Christensen
Bureau of Land Management
Phoenix, District Office
2015 W. Deer Valley Rd
Phoenix, Arizona 85027

Ref: DRAFT - LOWER GILA RESOURCE AREA

Dear Sir

33-1 The Off Highway Vehicle Designation for the Coffee Pot Botanical Area of Environmental Concern should be changed from "Closed" to "LIMITED" for the existing roads, trails and traditional or historically used vehicle routes. (See ATLAC COFFEE POT AREA MAP #011795). The people of Ajo, Arizona have used the existing roads and trails etc. since the beginning. We have used them after they were closed in 1988; no one informed us they were closed. Recent BLM studies have not shown any impact because of our use. We use this land, your studies show we take care of it. Closing roads in this area would violate public right of way under Revised Statute 2477. Don't fence us out, designate the area "LIMITED" vehicle use.

33-2 The PROPOSED ACTION for Desert Tortoise Habitat Management is too severe. You indicate the costs to ranchers could cause extreme hardship if this action is taken. Under the BLM "NO ACTION" alternative you show there will be no negative impact to the Tortoises. We in Ajo believe that "NO ACTION" is the best course concerning the Desert Tortoise Management in this area.

GR The Ajo area does not need any BLM Extended Camping Areas. BLM camps are unfair competition to the existing semi-public and private Camping facilities in the area. BLM should enforce the existing 14 day camping limit.

33-3 Installation of BLM signs is of concern, any signs should be unobtrusive and used sparingly. The large gaudy signs currently on the Goldwater Bombing Range detract from the Semi-Primitive nature of these lands.

The last national election is an indication that the people in Ajo as well as the rest of the nation want less government intrusion in our lives not more.

Please include my name on any mailing list concerning any future action by the BLM in this matter.

Sincerely,
John Ryder

33

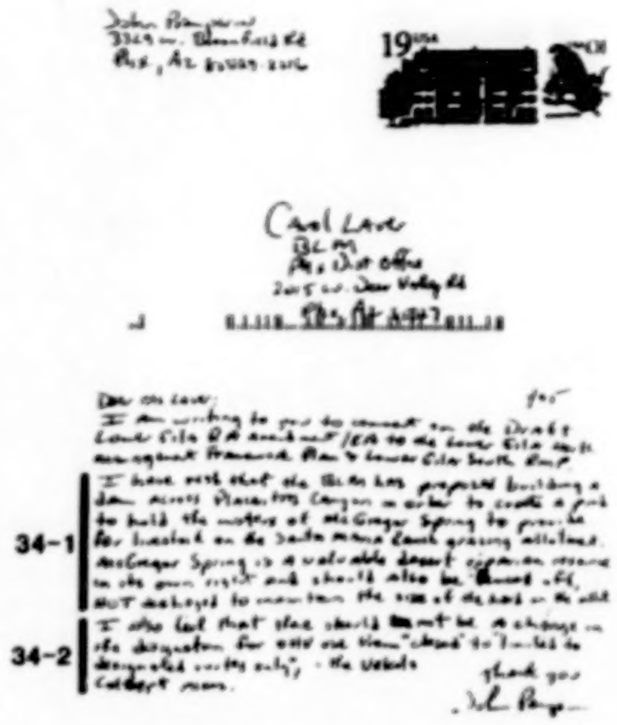
## People who sent letter #33

A ALCON
AMY J ALLEN
BRYAN ALZER
LARRY ARMITAGE
MARIAN ARTHUR
WILLIAM L AUSUM
GARY BAGBY
CAROLYN BAIGER
HARVEY BALLARD
IRMA BARRY
A D BAUSMAN
ROBERTO BEDEHBENDER
DAVID C AND SUSAN E BERNARD
LOWELL BLOW
LARRY AND ROSE BONEY
GENEVA BRIGMAN
GWENDOLYN F BRYAN
BOB AND JAMIE E BRYANT
TOBY D AND MARY N BRYANT
HARRY P BURKEY
TRACY BUTENKO
REBECCA CARRERA
YOLANDA CASTILLO
MARK CAYLE
GARY CHATHAM
SYLVIA CHERRY
JOHN W CLARK
MAE AND IVAN A COLPITTS
O WILLIAM DALY
LEON A AND SALLY DEMARS
L AND H DENNING
VERN DENNIS
AUDREY DOMINGUZ
HUGH W AND L E DRAKE
ELOINA FELIX
LILLIAN FITTS
MARGOT A FRAME BISSELL
DANIEL R GALEZ
BUDDY AND DIANNE GALLERANI
JACK A AND J ALLEN GARCHOW
ALEX GARCIA
KAREN GONZALEZ
MARTIN J AND HENRY P GRAY
J R GRAZIER
MARVIN GREHN
ALLEN F GUENTHER
JIM HACKER
HAZEL B HAMMAN
MARIA AND RAYMOND HANSON
BOBBIE HARGIS
BOBBY, PEGGY, AND GEORGE
HAVINS
RON AND SHEILA HAY
PAT HEMENWAY
CAROLEE HEMITT
PHOEBIE E HENSLEY
HELEN L HIGGINS
BOB J AND DOROTHY J HIGHTOWER
MICHAEL AND TRICIA HOLT
STEVEN HOLT
MR AND MRS ROBERT HUREAN
TIMOTHY D HUCKEBA
W LAVERNE AND MRS JOAN HUFF
HELEN HUGHES
GLADYS HUME
CYNTHIA, ANN L, HOWARD L, AND
WILLIAM T HUNTER
RON HUNTER
RONALD A HURLBUT II
A G HUTCHENS
SYLVIA IRIN
MR & MRS DOYLE IVY
J C AND BILLYE J JACKS
RAYMOND W JENSEN
ROBERT KEITH
CHARLES KETCHUM
JIM KEYS
CAROLYN J KLINEFETS
MR AND MRS EDWIN KNIGHT
LADAWNA KORNACK
MELVA KORNACK
MARIE A KRAUSMANN
CATHERINE AND FLOYD S
LACEWELL JR
LANA L LAIRD
NADINE LARREMORE
WILLIAM LEMPSHIRE
SIMON H LEON JR
ROBERT L LOPER
ALMA ROSA LOPEZ

33

DAVID LOVATO
BILLIE LUNDY
JOSEPH M MARCHESANO
ERIC B MARCUS
EMOGENE MARTIN
IRENE M MARTIN
ROY D AND LYNN MARTIN
CORNELIUS J AND FLORENCE M
MCGRADY
ELIZABETH MCKAY
CHARLES L MCNARY
JOHN L MCVANOLDS
HARRY MELTS
RAUL C MOJICA
J ANTONIO MONTES
TOM MORISKY
ANN M AND EDWARD D MORROW
BETTY J MORROW
GINA MUNOZ
LOREN L MURRAY
A J AND LOIS J MUTH
BEE MYER
HORACIO G NOGALES
RUBEN G NOGALES
LYDIA NORTHRUP
ANNA NUSSER
KATARINA OBERG
DWIGHT J OGDEN
JANE OGDEN
STEVE OLEA JR
BARBARA L O'NEAL
LEWIS O'NEAL
MICHELLE A PACHECO
CLARENCE PARK
FRANK [illegible], FRANCISCO, AND VICKI
PARRA
MICHAEL PATERSON
BARBARA L PHILLIPS
ROBERT L POSEY
LEE E PRICE
BRENDA REID
WILLIAM J REID
ANNA B RICHARDSON
WILLARD E RIED
ADRIAN RODRIGUEZ
TINA, CECILIA M, AND ROBERT
RUNGE SR
RICHARD G RUSSELL
T T SANDERS
CONNIE SCHMIDT
DON SCHNELL
JAMES T SCHNELL
VIRGINIA AND JIM SCHNELL
JUDY SCHIPSON
B W SEELEY
JERRY SEXTON
ROY AND CATHERINE SHELLY
M W AND GAIL SHIVELY
ALBERT L SIPE
CHRISTLE STARKEY
RONALD A STEINMETZ
CLIFTON AND FAYE STEWART
RONALD G STRATTON
KEVIN AND MICHELLE TALLANT
DON AND FLORENCE TAYLOR
BETTY TOPPING
BENNY TORREZ
MARY K VANDAGRIFF
EDWARD V VEGA
RICHARD WALKER JR
PAM WALTERS
STEVE WEATHERBY
DAVID L WELLS
KIM WESTLING
BETTY AND WESLEY WHITING
BETTY J WILLIAMS
DORA M WILLIAMS
VALONE AND BOB R WILLIAMS
ALICE WILLIFORD
HAROLD I AND SUSAN WILSON
THOMAS M WINKLER
RITA WOHLGAMUTH
SUZETTE T WRIGHT
VIKKI L WRIGHT
DONALD H WINSTON
WANDA L WINSTON
CARLOS F YANEZ
CARLOS M YANEZ
FRANCISCO YANNZ
KATHLEEN M YOAKUM

**34**



John Bo[illegible]
3349 W. [illegible] Rd
Phx, AZ 85029-2016

Carol Laver
BLM
Phx Dist Office
2015 W. Deer Valley Rd
Phx AZ 85027

Dear Ms Laver: [illegible]

I am writing to you to comment on the Draft Lower Gila RMP amendment/EA to the Lower Gila North Management Framework Plan & Lower Gila South RMP.

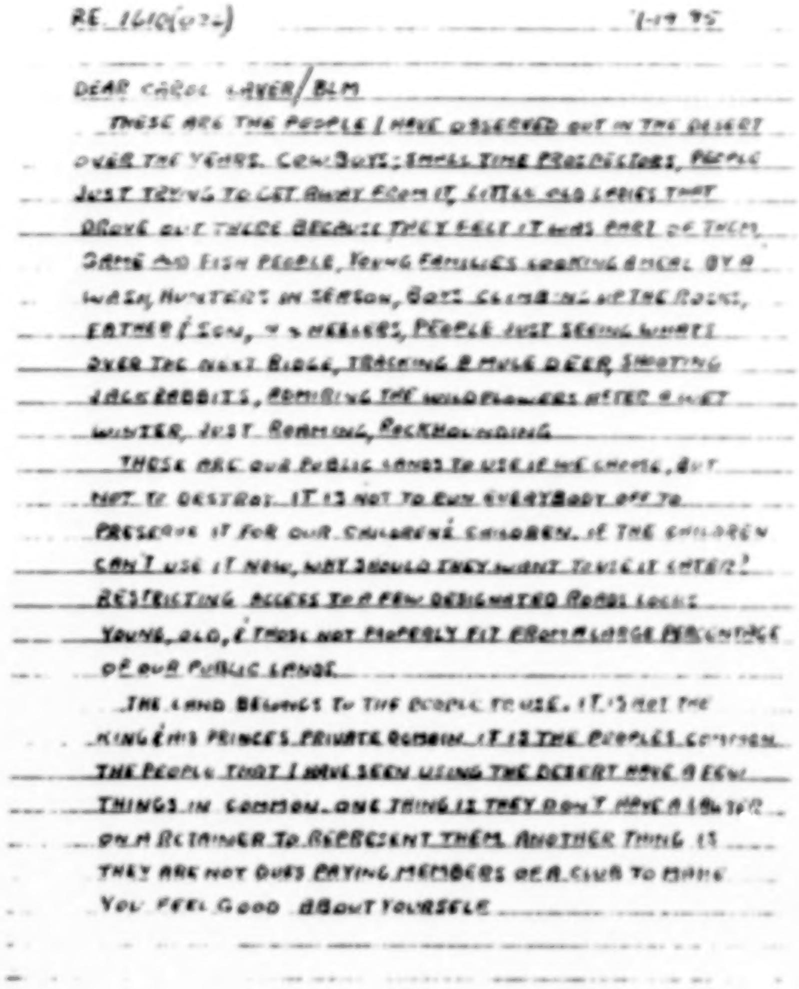
34-1 I have read that the BLM has proposed building a dam across Placeritos Canyon in order to create a pond to hold the waters of McGregor Spring to provide for livestock on the Santa Maria Ranch grazing allotment. McGregor Spring is a valuable desert riparian area in its own right and should also be fenced off, NOT destroyed to maintain the use of the land [illegible]

34-2 I also feel that there should not be a change in the designation for ORV use from "closed" to "limited to designated routes only", - the vehicle [illegible] more.

thank you

John Bo[illegible]

**35**



RE 1610(026) 1-19-95

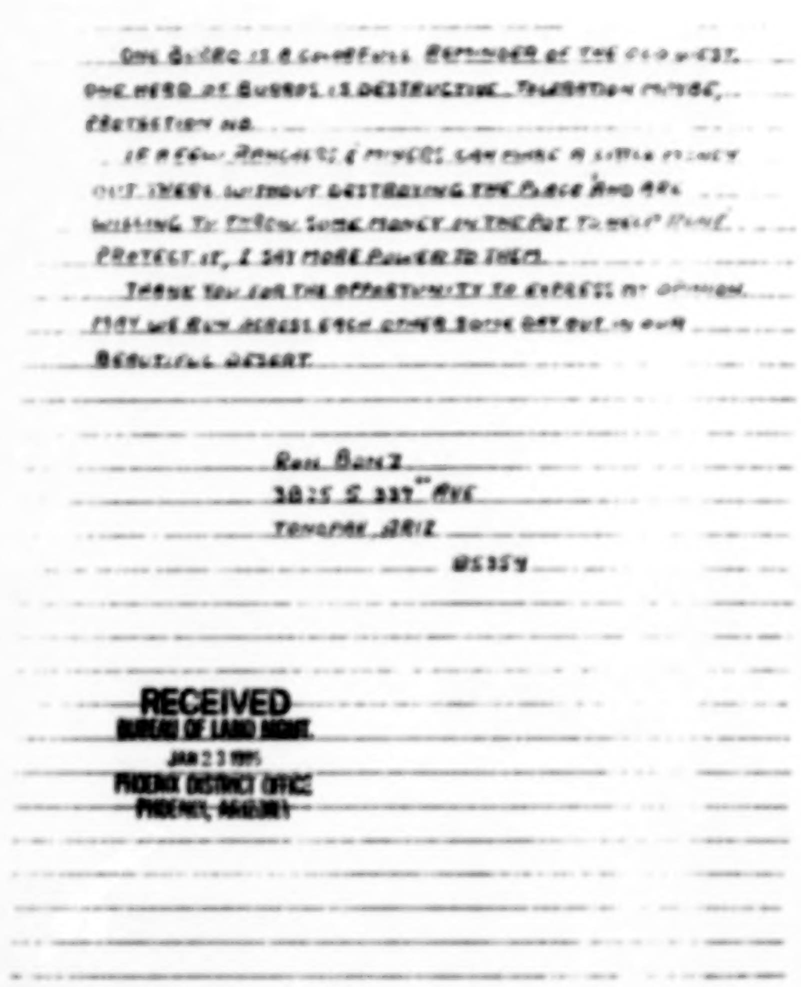
DEAR CAROL LAVER/BLM

THESE ARE THE PEOPLE I HAVE OBSERVED OUT IN THE DESERT OVER THE YEARS. COWBOYS; SMALL TIME PROSPECTORS, PEOPLE JUST TRYING TO GET AWAY FROM IT, LITTLE OLD LADIES THAT DROVE OUT THERE BECAUSE THEY FELT IT WAS PART OF THEM, GAME AND FISH PEOPLE, YOUNG FAMILIES COOKING A MEAL BY A WASH, HUNTERS IN SEASON, BOYS CLIMBING UP THE ROCKS, FATHER & SON, 4 x 4 WHEELERS, PEOPLE JUST SEEING WHAT'S OVER THE NEXT RIDGE, TRACKING A MULE DEER, SHOOTING JACKRABBITS, ADMIRING THE WILDFLOWERS AFTER A WET WINTER, JUST ROAMING, ROCKHOUNDING

THESE ARE OUR PUBLIC LANDS TO USE IF WE CHOOSE, BUT NOT TO DESTROY. IT IS NOT TO RUN EVERYBODY OFF TO PRESERVE IT FOR OUR CHILDREN'S CHILDREN. IF THE CHILDREN CAN'T USE IT NOW, WHY SHOULD THEY WANT TO USE IT LATER? RESTRICTING ACCESS TO A FEW DESIGNATED ROADS LOCKS YOUNG, OLD, & THOSE NOT PROPERLY FIT FROM A LARGE PERCENTAGE OF OUR PUBLIC LANDS.

THE LAND BELONGS TO THE PEOPLE TO USE. IT IS NOT THE KING & HIS PRINCES PRIVATE DOMAIN. IT IS THE PEOPLES COMMON. THE PEOPLE THAT I HAVE SEEN USING THE DESERT HAVE A FEW THINGS IN COMMON. ONE THING IS THEY DON'T HAVE A LAWYER ON A RETAINER TO REPRESENT THEM. ANOTHER THING IS THEY ARE NOT DUES PAYING MEMBERS OF A CLUB TO MAKE YOU FEEL GOOD ABOUT YOURSELF

## 35



ONE BURRO IS A COLORFULL REMINDER OF THE OLD WEST. ONE HERD OF BURROS IS DESTRUCTIVE. TOLERATION MAYBE, PROTECTION NO.

IF A FEW RANCHERS & MINERS CAN MAKE A LITTLE MONEY OUT THERE WITHOUT DESTROYING THE PLACE AND ARE WILLING TO THROW SOME MONEY IN THE POT TO HELP [illegible] PROTECT IT, I SAY MORE POWER TO THEM.

THANK YOU FOR THE OPPORTUNITY TO EXPRESS MY OPINION. MAY WE RUN ACROSS EACH OTHER SOME DAY OUT IN OUR BEAUTIFULL DESERT.

RON BONZ
3825 S. 337th AVE
TONOPAH, ARIZ
85354

RECEIVED
BUREAU OF LAND MGMT.
JAN 23 1995
PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA

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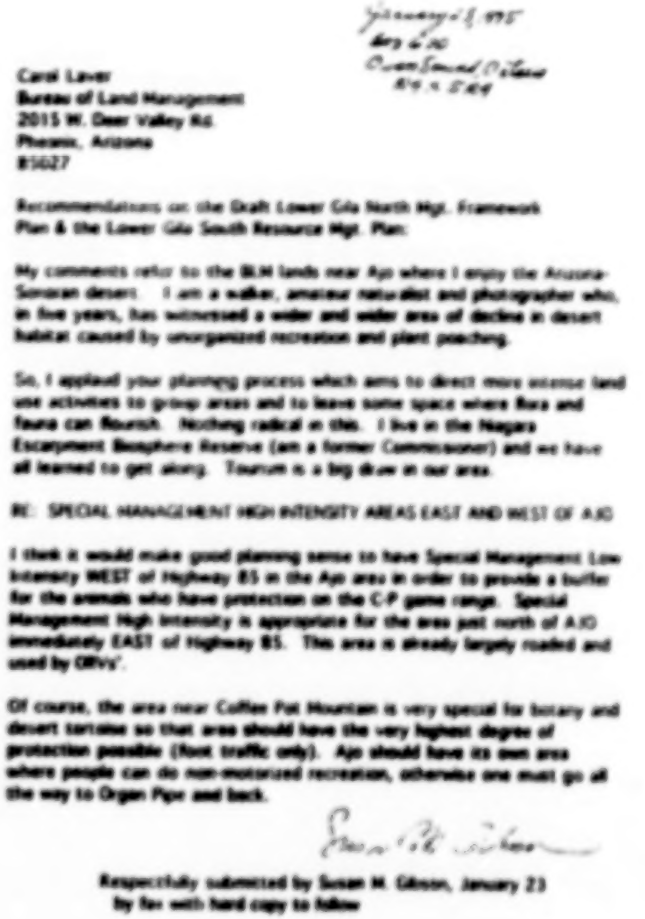


January 23, 1995
[illegible]

Carol Laver
Bureau of Land Management
2015 W. Deer Valley Rd.
Phoenix, Arizona
85027

Recommendations on the Draft Lower Gila North Mgt. Framework Plan & the Lower Gila South Resource Mgt. Plan:

My comments refer to the BLM lands near Ajo where I enjoy the Arizona-Sonoran desert. I am a walker, amateur naturalist and photographer who, in five years, has witnessed a wider and wider area of decline in desert habitat caused by unorganized recreation and plant poaching.

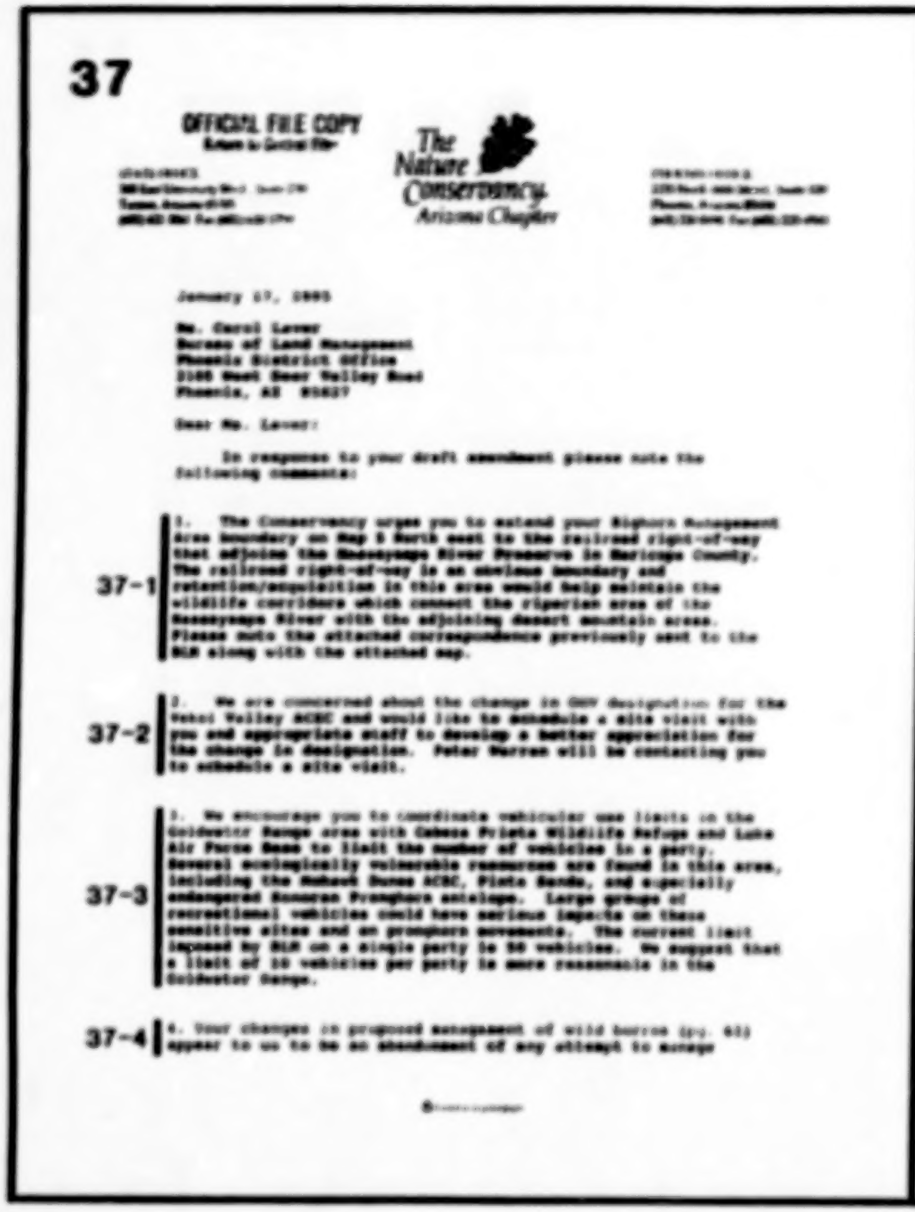
So, I applaud your planning process which aims to direct more intense land use activities to group areas and to leave some space where flora and fauna can flourish. Nothing radical in this. I live in the Niagara Escarpment Biosphere Reserve (am a former Commissioner) and we have all learned to get along. Tourism is a big draw in our area.

RE: SPECIAL MANAGEMENT HIGH INTENSITY AREAS EAST AND WEST OF AJO

I think it would make good planning sense to have Special Management Low Intensity WEST of Highway 85 in the Ajo area in order to provide a buffer for the animals who have protection on the C-P game range. Special Management High Intensity is appropriate for the area just north of AJO immediately EAST of Highway 85. This area is already largely roaded and used by ORVs'.

Of course, the area near Coffee Pot Mountain is very special for botany and desert tortoise so that area should have the very highest degree of protection possible (foot traffic only). Ajo should have its own area where people can do non-motorized recreation, otherwise one must go all the way to Organ Pipe and back.

Respectfully submitted by Susan M. Gibson, January 23
by fax with hard copy to follow



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OFFICIAL FILE COPY

The Nature Conservancy
Arizona Chapter

January 17, 1995

Ms. Carol Lever
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, AZ 85027

Dear Ms. Lever:

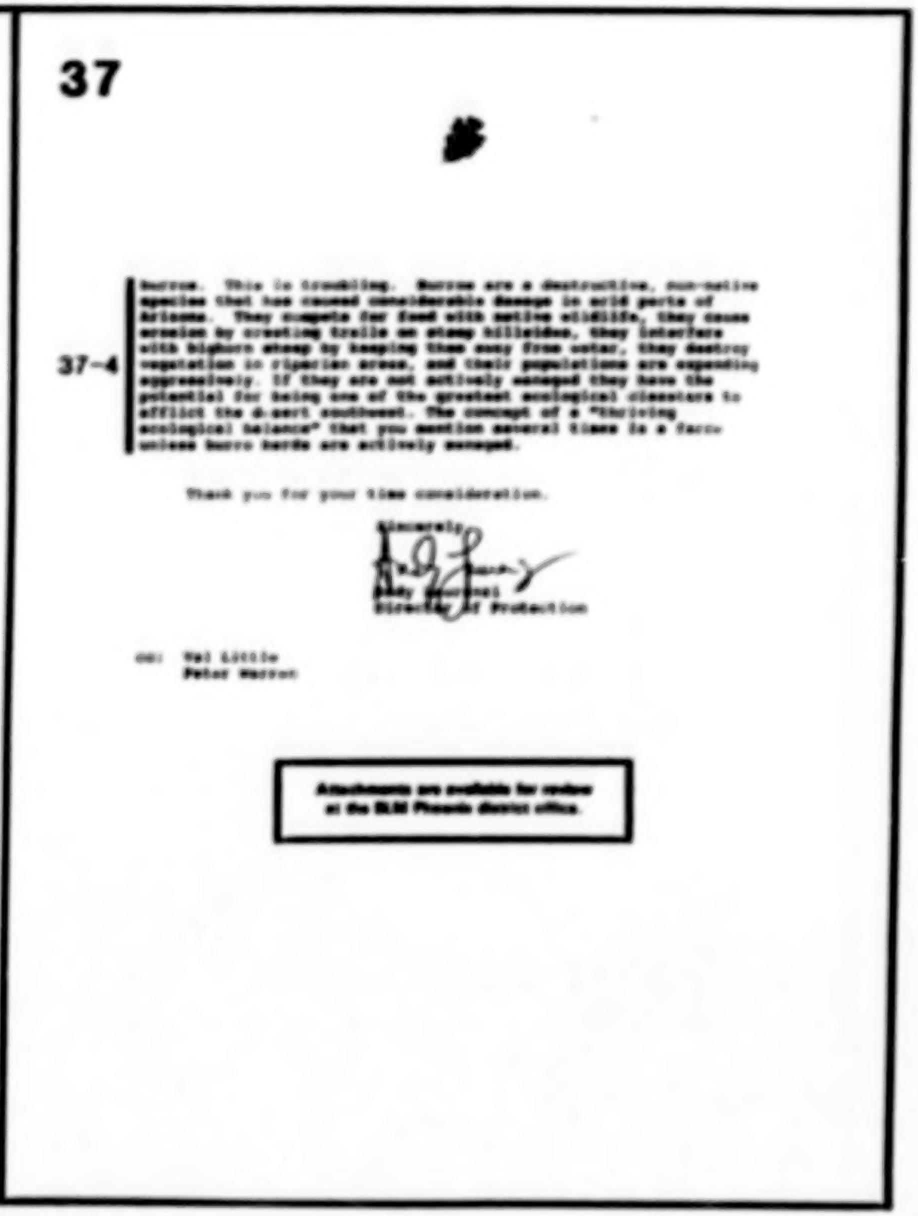
In response to your draft amendment please note the following comments:

37-1 1. The Conservancy urges you to extend your Bighorn Management Area boundary on Map 5 North east to the railroad right-of-way that adjoins the Hassayampa River Preserve in Maricopa County. The railroad right-of-way is an obvious boundary and retention/acquisition in this area would help maintain the wildlife corridors which connect the riparian area of the Hassayampa River with the adjoining desert mountain areas. Please note the attached correspondence previously sent to the BLM along with the attached map.

37-2 2. We are concerned about the change in OHV designation for the Vekol Valley ACEC and would like to schedule a site visit with you and appropriate staff to develop a better appreciation for the change in designation. Peter Warren will be contacting you to schedule a site visit.

37-3 3. We encourage you to coordinate vehicular use limits on the Goldwater Range area with Cabeza Prieta Wildlife Refuge and Luke Air Force Base to limit the number of vehicles in a party. Several ecologically vulnerable resources are found in this area, including the Mohawk Dunes ACEC, Pinta Sands, and especially endangered Sonoran Pronghorn antelope. Large groups of recreational vehicles could have serious impacts on these sensitive sites and on pronghorn movements. The current limit imposed by BLM on a single party is 50 vehicles. We suggest that a limit of 10 vehicles per party is more reasonable in the Goldwater Range.

37-4 4. Your changes in proposed management of wild burros (pg. 41) appear to us to be an abandonment of any attempt to manage



**37**

burros. This is troubling. Burros are a destructive, non-native species that has caused considerable damage in arid parts of Arizona. They compete for food with native wildlife, they cause erosion by creating trails on steep hillsides, they interfere with bighorn sheep by keeping them away from water, they destroy vegetation in riparian areas, and their populations are expanding aggressively. If they are not actively managed they have the potential for being one of the greatest ecological disasters to afflict the desert southwest. The concept of a "thriving ecological balance" that you mention several times is a farce unless burro herds are actively managed.

Thank you for your time consideration.

Sincerely,

Andy Laurenzi
Director of Protection

cc: Val Little
Peter Warren

**Attachments are available for review at the BLM Phoenix district office.**

**38**

January 17, 1995

Carol Lever
Team Leader Lower Gila Resource Area
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd
Phoenix, Arizona 85027
Subject: Lower Gila Resource Area Amendment Draft
Saddle Mt. Special Recreation Management Area

Comments

Appreciate the designation including the two sites Saddle Mountain and the Palo Verde Hills as one management area. Under that plan, the areas can provide protection for one another.

The entire management area designation as semi primitive motorized seems appropriate with the exception of 4-WD, dune buggy and dirt bikes. Even knowing their introduction will be managed, it strikes fear into my heart. I've seen what damage these vehicles can do to desert areas. I am pleased that protection of the geological, cultural and wildlife interpretive site will be planned for the future

38-1 I am in agreement that the northern and northeastern portions of Saddle Mt. be used primarily for visitor access with the use of facilities to protect the resource values of the areas. The southern and western portions should continue to be remote and undeveloped

I'm afraid I don't agree with short term camping areas. Through the years, I have watched rock hounds camp in the area with no problem--I would hate to have a specified camping area. It appears to me it would only encourage more persons to spend more time in the area

38-2 In the case of Saddle Mt., I believe there is some private property located east of the area and would like to know if persons owning the property will be allowed to develop their land into a resort area. Will the management area designation prohibit a large, public resort?

I appreciate the opportunity to comment

Sincerely yours,
M. Pat Hathaway
M. Pat Hathaway/HC0 2 Box 610-B/Tonopah AZ 85354/(602) 386 5212

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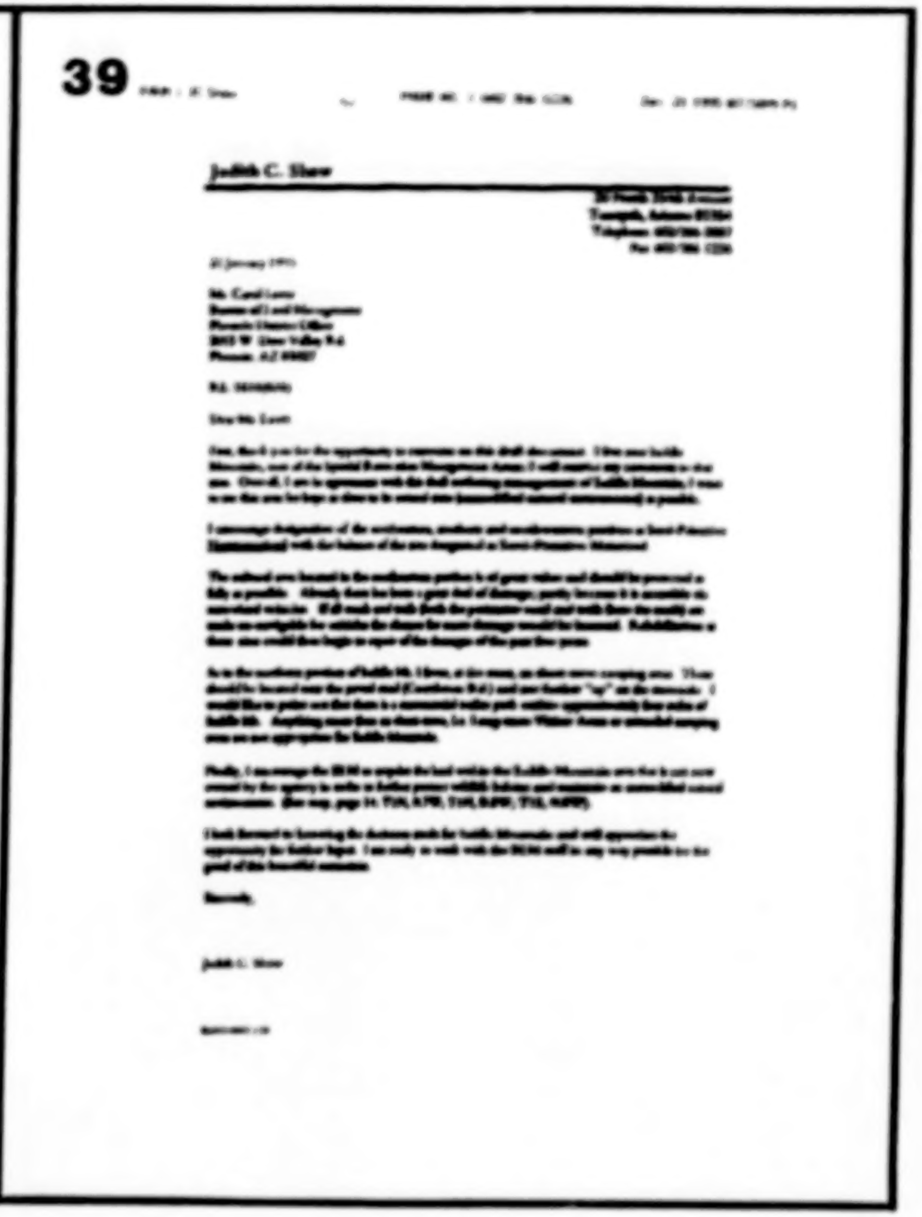
**39**



Judith C. Shaw

**40**

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AJO TRADITIONAL LAND USE CHAPTER OF
THE PEOPLE FOR THE WEST
PO BOX 443, AJO, AZ 85321

January 17, 1995

John R. Christensen
Bureau of Land Management
Phoenix, District Office
2015 W. Deer Valley Rd
Phoenix, Arizona 85027

Ref: DRAFT - LOWER GILA RESOURCE AREA

Dear Mr. Christensen

40-1 The Off Highway Vehicle Designation for the Coffee Pot Botanical area of Environmental Concern should be changed from "Closed" to "LIMITED" for the existing roads, trails and traditional or historically used vehicle routes.

I have recently consulted with local Ajo people, driven and flown over the Coffee Pot ACEC, utilizing Geological Survey 7 1/2 minute quadrangle maps I have made a map showing this area. On the map I have highlighted the existing roads, trails and traditional or historical vehicle routes that I am aware of. A copy of this map titled, "ATLUC COFFEE POT AREA MAP # 011795" is enclosed for your information. This map may not display all of the routes traditionally used in this area. As I become aware of any additional routes I will forward you an updated copy of the map.

The people of Ajo, Arizona have used the roads indicated on the ATLUC map since the beginning. We have used them after they were closed in 1988, as no one in this area knew they were closed. Every road highlighted on the map has been used by many of the persons I have talked to in Ajo. The roads are used for hunting, picnicking, camping etc.

It is our understanding that recent BLM studies have not shown any impact because of our use of these routes. Ajo people use this land, your studies show we have taken care of it. Why is there any need to restrict it any more than the "LIMITED" vehicle use provides for. As stated before by ATLUC the land in the Coffee Pot ACEC is so rugged that misuse of a vehicle in this area will probably result in severe damage to the vehicle.

In addition it appears that closure of existing routes in this area all of which are were established before 1976 would violate public right of way under Revised Statute 2477. Don't fence us out, designate the area "LIMITED" vehicle use.

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**40**

40-2 The PROPOSED ACTION for Desert Tortoise Habitat Management is too severe. You indicate the costs to ranchers could cause extreme hardship if this action is taken. Under the BLM "NO ACTION" alternative you show there will be no negative impact to the Tortoise. Ajo BLM lands are surrounded by wilderness or severely restricted lands that protect the Tortoise in this area. We in Ajo believe that "NO ACTION" is the best course concerning the Desert Tortoise Management in this area.

GR The Ajo area does not need any BLM Extended Camping Areas. BLM camps constitute unfair competition to the existing semi-public and private camping facilities in the area. Expansion of the Coyote Howls Park in Why, Arizona would be appropriate. The BLM should enforce the existing 14 day camping limit.

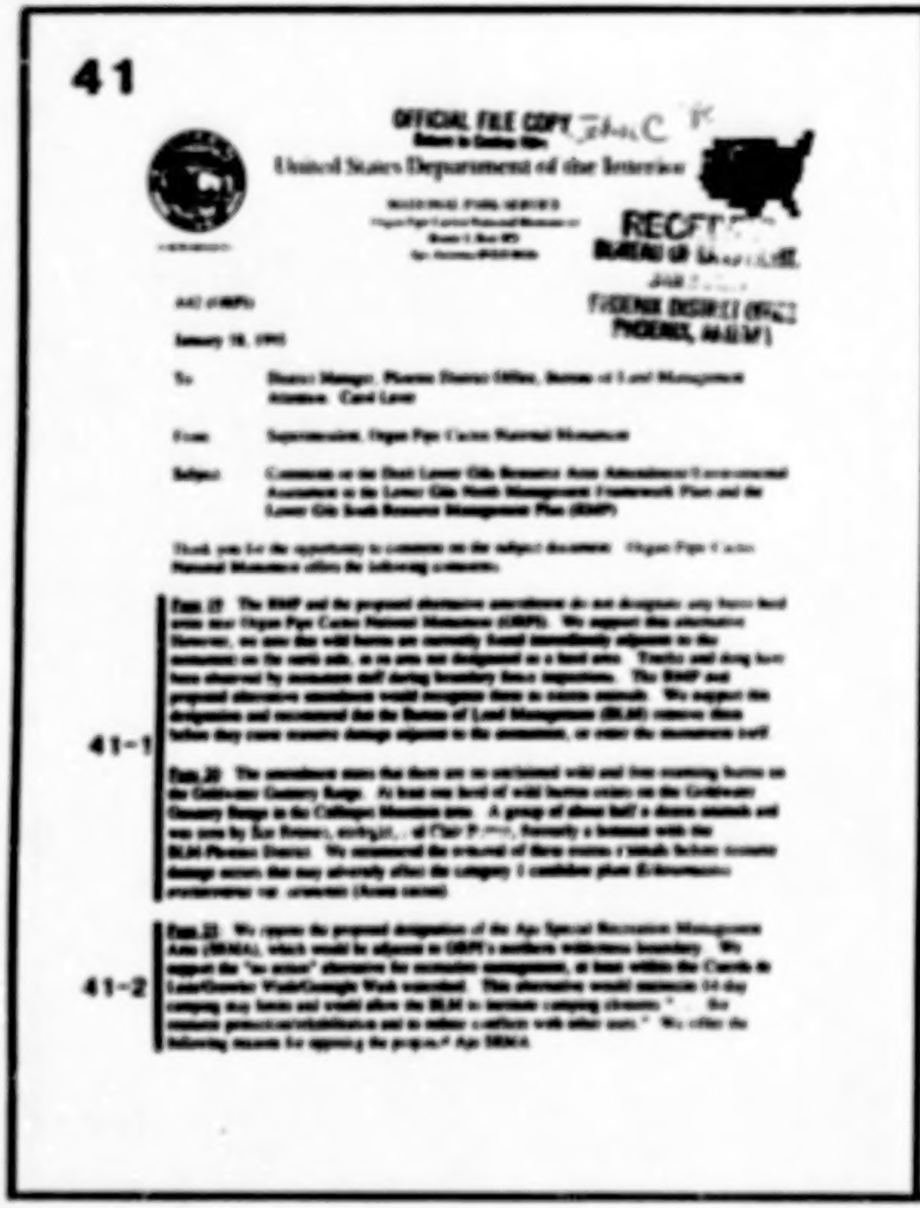
40-3 Installation of BLM signs is of concern, any signs should be unobtrusive and used sparingly. We do no oppose all signs but the large gaudy signs currently on the Goldwater Bombing Range detract from the Semi-Primitive nature of these lands.

The last national election is an indication that the people in Ajo as well as the rest of the nation want less government intrusion in our lives not more. We believe BLM would do well to heed the indications of the election.

Please keep me advised concerning any future action by the BLM in this matter.

Sincerely,
James [illegible]
James [illegible]
President, ATLUC/PFW

Enclosure is available for review
at the BLM Phoenix district office.



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United States Department of the Interior

NATIONAL PARK SERVICE
Organ Pipe Cactus National Monument
[illegible]

BUREAU OF [illegible]
PHOENIX DISTRICT OFFICE
PHOENIX, ARIZ

January [illegible]

To: District Manager, Phoenix District Office, Bureau of Land Management
Attention: [illegible]

From: Superintendent, Organ Pipe Cactus National Monument

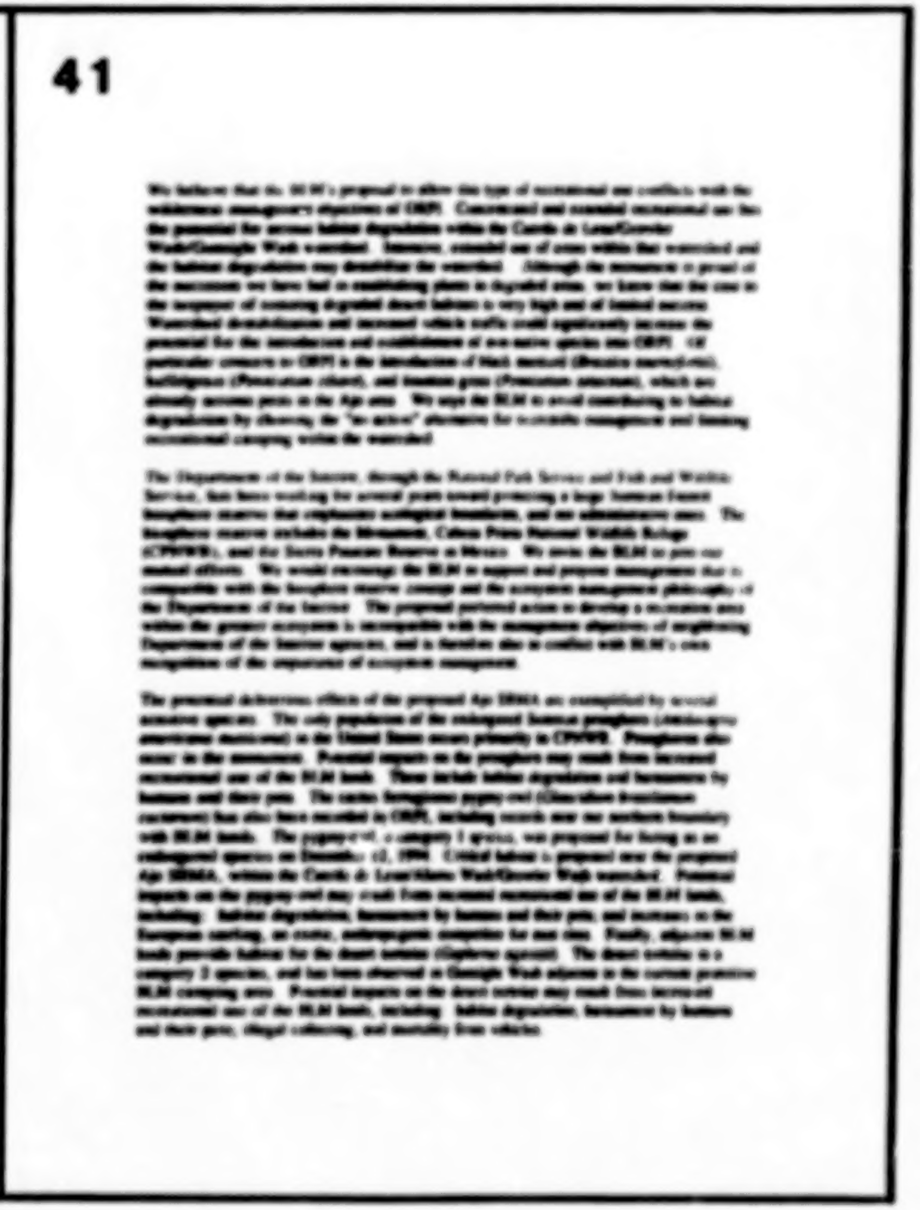
Subject: Comments on the Draft Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan (RMP)

Thank you for the opportunity to comment on the subject document. Organ Pipe Cactus National Monument offers the following comments:

41-1 [illegible]

[illegible]

41-2 [illegible]



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[illegible]

[illegible]

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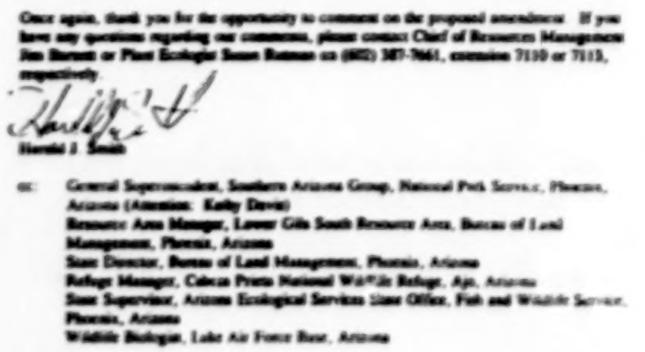

Once again, thank you for the opportunity to comment on the proposed amendment. If you have any questions regarding our comments, please contact Chief of Resources Management Jim Barnett or Plant Ecologist Susan Rutman at (602) 387-7661, extension 7110 or 7113, respectively.

Harold J. Smith

cc: General Superintendent, Southern Arizona Group, National Park Service, Phoenix, Arizona (Attention: Kathy Davis)
Resource Area Manager, Lower Gila South Resource Area, Bureau of Land Management, Phoenix, Arizona
State Director, Bureau of Land Management, Phoenix, Arizona
Refuge Manager, Cabeza Prieta National Wildlife Refuge, Ajo, Arizona
State Supervisor, Arizona Ecological Services State Office, Fish and Wildlife Service, Phoenix, Arizona
Wildlife Biologist, Luke Air Force Base, Arizona

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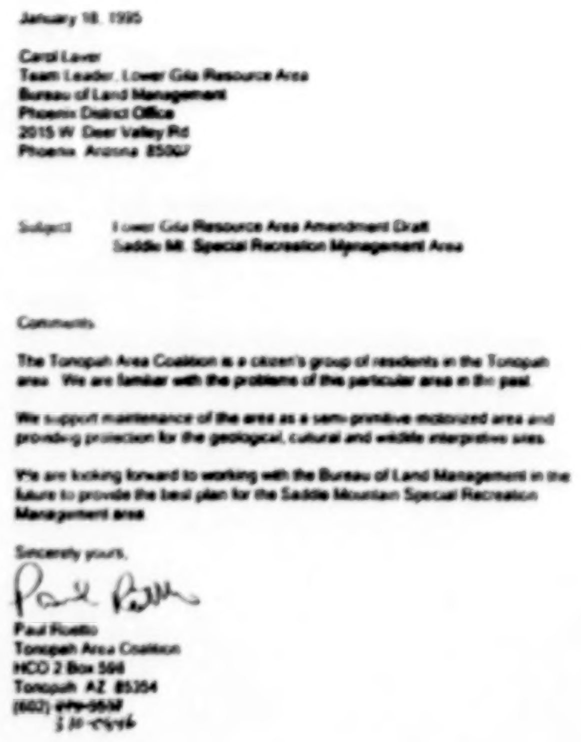


January 18, 1995

Carol Laver
Team Leader, Lower Gila Resource Area
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd
Phoenix, Arizona 85027

Subject: Lower Gila Resource Area Amendment Draft
Saddle Mt. Special Recreation Management Area

Comments

The Tonopah Area Coalition is a citizen's group of residents in the Tonopah area. We are familiar with the problems of this particular area in the past.

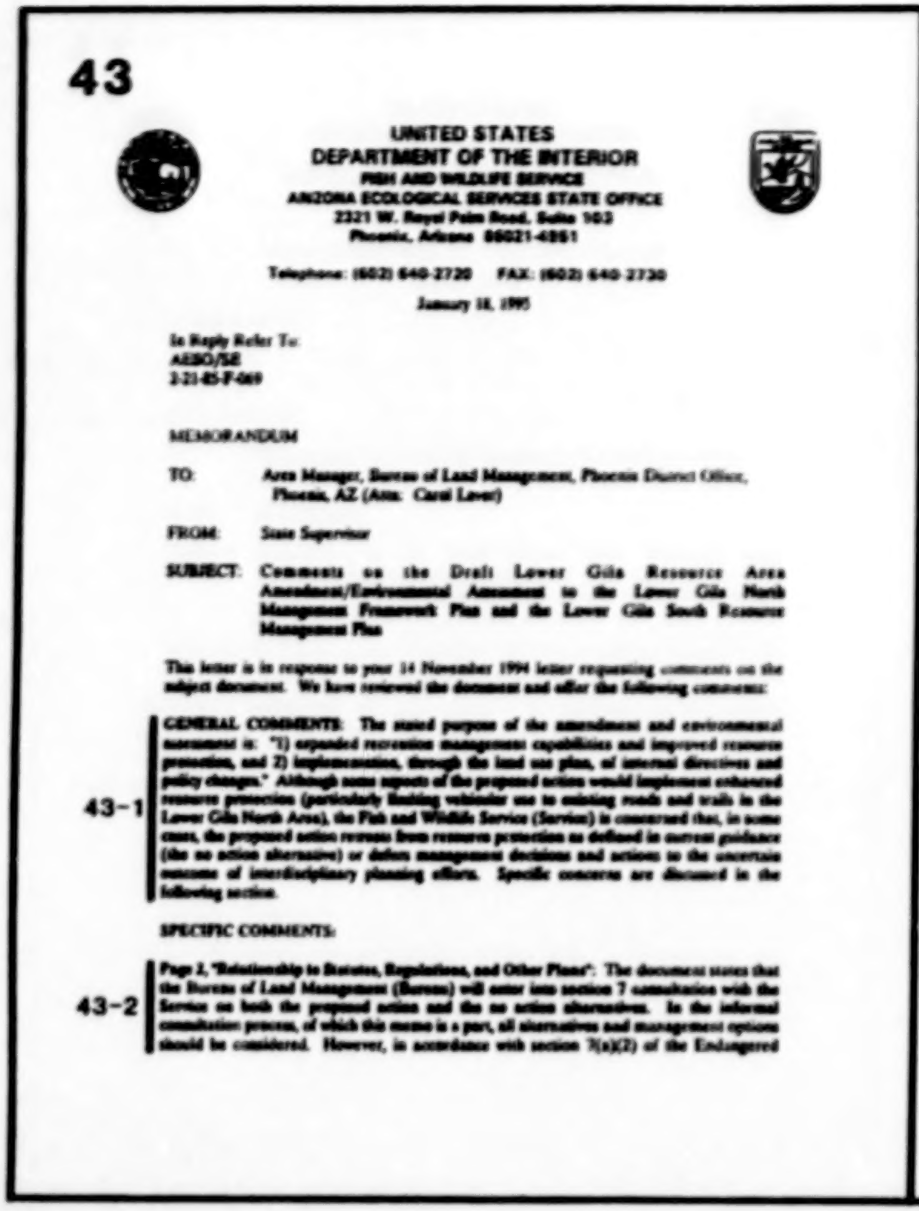
We support maintenance of the area as a semi-primitive motorized area and providing protection for the geological, cultural and wildlife interpretive sites.

We are looking forward to working with the Bureau of Land Management in the future to provide the best plan for the Saddle Mountain Special Recreation Management area.

Sincerely yours,

Paul Roetto

Paul Roetto
Tonopah Area Coalition
HCO 2 Box 598
Tonopah, AZ 85354
(602) ~~[illegible]~~
[illegible]



**43**

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ARIZONA ECOLOGICAL SERVICES STATE OFFICE
2321 W. Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951

Telephone: (602) 640-2720 FAX: (602) 640-2730

January 18, 1995

In Reply Refer To:
AESO/SE
2-21-95-F-069

MEMORANDUM

TO: Area Manager, Bureau of Land Management, Phoenix District Office, Phoenix, AZ (Attn: Carol Lever)

FROM: State Supervisor

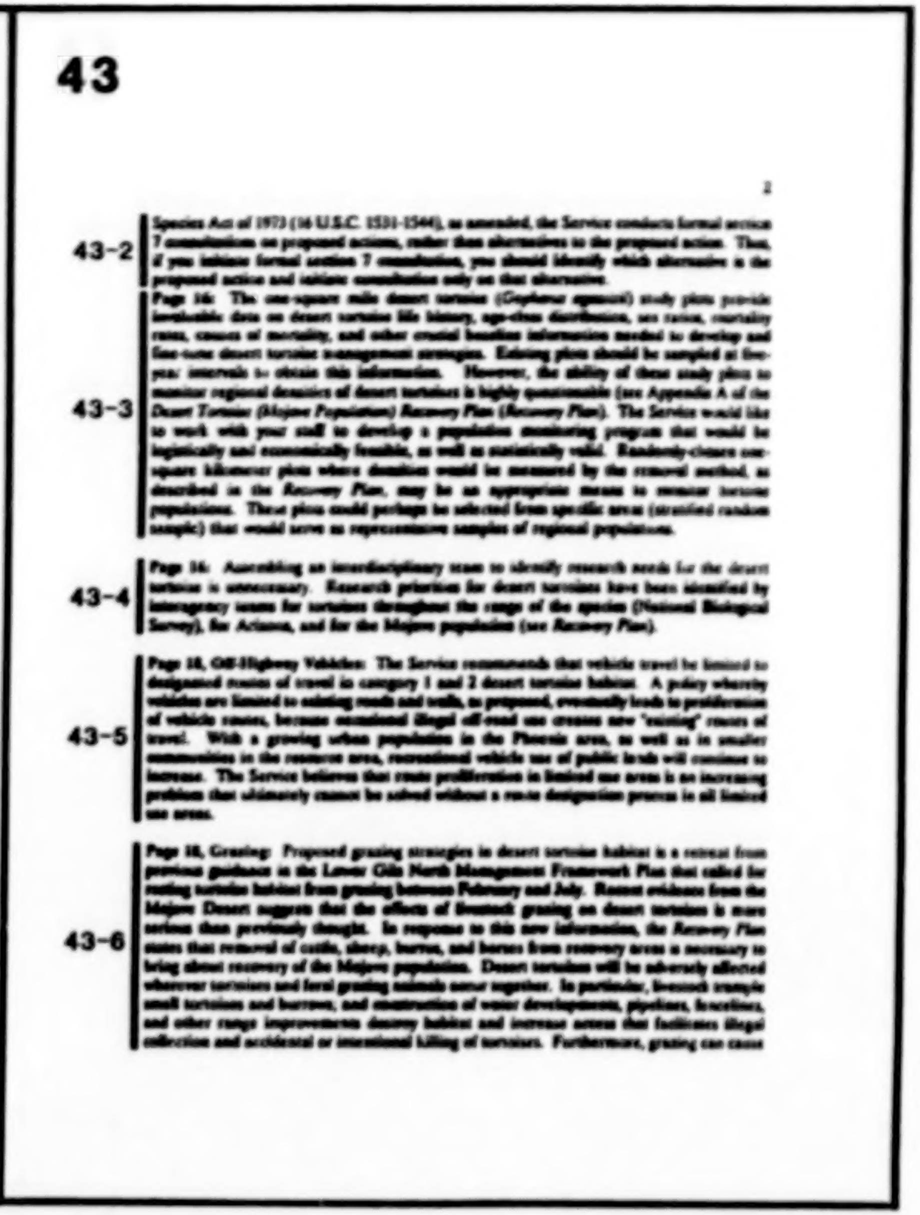
SUBJECT: Comments on the Draft Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan

This letter is in response to your 14 November 1994 letter requesting comments on the subject document. We have reviewed the document and offer the following comments:

43-1 GENERAL COMMENTS: The stated purpose of the amendment and environmental assessment is: "1) expanded recreation management capabilities and improved resource protection, and 2) implementation, through the land use plan, of internal directives and policy changes." Although some aspects of the proposed action would implement enhanced resource protection (particularly limiting vehicular use to existing roads and trails in the Lower Gila North Area), the Fish and Wildlife Service (Service) is concerned that, in some cases, the proposed action retreats from resource protection as defined in current guidance (the no action alternative) or defers management decisions and actions to the uncertain outcome of interdisciplinary planning efforts. Specific concerns are discussed in the following section.

SPECIFIC COMMENTS:

43-2 Page 2, "Relationship to Statutes, Regulations, and Other Plans": The document states that the Bureau of Land Management (Bureau) will enter into section 7 consultation with the Service on both the proposed action and the no action alternatives. In the informal consultation process, of which this memo is a part, all alternatives and management options should be considered. However, in accordance with section 7(a)(2) of the Endangered



**43**

43-2 Species Act of 1973 (16 U.S.C. 1531-1544), as amended, the Service conducts formal section 7 consultations on proposed actions, rather than alternatives to the proposed action. Thus, if you initiate formal section 7 consultation, you should identify which alternative is the proposed action and initiate consultation only on that alternative.

43-3 Page 16: The one-square mile desert tortoise (*Gopherus agassizii*) study plots provide invaluable data on desert tortoise life history, age-class distribution, sex ratios, mortality rates, causes of mortality, and other crucial baseline information needed to develop and fine-tune desert tortoise management strategies. Existing plots should be sampled at five-year intervals to obtain this information. However, the ability of these study plots to monitor regional densities of desert tortoises is highly questionable (see Appendix A of the *Desert Tortoise (Mojave Population) Recovery Plan* (*Recovery Plan*). The Service would like to work with your staff to develop a population monitoring program that would be logistically and economically feasible, as well as statistically valid. Randomly-chosen one-square kilometer plots where densities would be measured by the removal method, as described in the *Recovery Plan*, may be an appropriate means to monitor tortoise populations. These plots could perhaps be selected from specific areas (stratified random sample) that would serve as representative samples of regional populations.

43-4 Page 16: Assembling an interdisciplinary team to identify research needs for the desert tortoise is unnecessary. Research priorities for desert tortoises have been identified by interagency teams for tortoises throughout the range of the species (National Biological Survey), for Arizona, and for the Mojave population (see *Recovery Plan*).

43-5 Page 18, Off-Highway Vehicles: The Service recommends that vehicle travel be limited to designated routes of travel in category 1 and 2 desert tortoise habitat. A policy whereby vehicles are limited to existing roads and trails, as proposed, eventually leads to proliferation of vehicle routes, because occasional illegal off-road use creates new "existing" routes of travel. With a growing urban population in the Phoenix area, as well as in smaller communities in the resource area, recreational vehicle use of public lands will continue to increase. The Service believes that route proliferation in limited use areas is an increasing problem that ultimately cannot be solved without a route designation process in all limited use areas.

43-6 Page 18, Grazing: Proposed grazing strategies in desert tortoise habitat is a retreat from previous guidance in the Lower Gila North Management Framework Plan that called for resting tortoise habitat from grazing between February and July. Recent evidence from the Mojave Desert suggests that the effects of livestock grazing on desert tortoises is more serious than previously thought. In response to this new information, the *Recovery Plan* states that removal of cattle, sheep, burros, and horses from recovery areas is necessary to bring about recovery of the Mojave population. Desert tortoises will be adversely affected wherever tortoises and feral grazing animals occur together. In particular, livestock trample small tortoises and burrows, and construction of water developments, pipelines, fencelines, and other range improvements destroy habitat and increase access that facilitates illegal collection and accidental or intentional killing of tortoises. Furthermore, grazing can cause soil erosion and compaction, reduced water infiltration rates, reductions in cryptogamic crusts, and long-term and often subtle changes in perennial and annual plant communities, particularly in the vicinity of livestock waters. Cumulatively, the habitat changes and direct mortality caused by grazing significantly adversely affect desert tortoise populations in the Mojave Desert (see Appendix D of the *Recovery Plan*). Though effects may differ in severity and type, these effects can also occur with the Sonoran population of desert tortoises.

43-6 The Service recommends removal of livestock from category 1 and 2 habitats from July 15 to October 15. This would eliminate trampling and forage competition during the period when tortoises are most active in the Sonoran desert. This action would be consistent with Objective 10 and management actions 10A, 10B, and 10C of "*Desert Tortoise Habitat Management on the Public Lands: A Rangewide Plan*" (*Rangewide Plan*) and would also be consistent with the draft desert tortoise management plan prepared by the Arizona Interagency Desert Tortoise Team.

43-1 In the second column of page 18, the document states that range improvements will be allowed in category 1 and 2 habitats if they do not conflict with desert tortoise habitats or populations. This is a retreat from existing management as described in the Lower Gila South Resource Management Plan that calls for no new livestock waters within two miles of "crucial" desert tortoise habitat. Because of the excessive habitat damage associated with livestock waters, no new waters should be constructed in category 1 and 2 habitats. This action would be consistent with Objective 10 and management action 10D of the *Rangewide Plan*.

With the exception of the Three Rivers Area of Critical Environmental Concern (ACEC), the proposed action does not address grazing issues in riparian areas; however, the Service believes this issue should be a topic for future plan amendments. Riparian ecosystems support diverse assemblages of species, including many of special status. Livestock grazing in riparian habitats typically results in reductions of plant species diversity and density, especially palatable broadleaf plants such as willow and cottonwood saplings, and is one of the most common causes of riparian degradation. Plant species composition may change as plants more vulnerable to overuse or that are unable to reestablish in the area are replaced by other plant species. Plants that are overused will exhibit a reduction in growth and vigor and recruitment of young plants may be reduced or eliminated as seedlings are either eaten or trampled. The new species composition may not provide the same level of bank protection or stabilization as the natural one. Compaction of soil in heavily used areas may reduce germination, creating areas of bare ground that are easily eroded. These conditions often result in erosion of stream channels and subsequent changes in stream hydrology. These changes can cause further changes in riparian plant communities.

Livestock also create paths through riparian habitat that contribute to habitat fragmentation and modification. Furthermore, the presence of livestock and associated developments and activities can result in increased populations of brown-headed cowbirds (*Molothrus ater*) that parasitize nests of many species of native birds and are a substantial threat to the

Southwestern willow flycatcher (*Empidonax traillii extimus*), a species proposed as endangered and present on the Santa Maria River in the planning area.

43-7 Page 18, Wild Horses and Burros: Grazing by wild horses and burros adversely affects tortoise populations in a manner similar to grazing by domestic livestock (see *Recovery Plan*). One of the objectives of horse and burro management should be reduction of adverse effects in key areas for tortoises, particularly where horse or burro populations are large or resource damage resulting from horses and burros is apparent. Removal of horses and burros from key areas would be an appropriate management action in these areas.

Page 18, Predator Controls: Predators are natural components of desert tortoise habitat and the Sonoran desert ecosystem. However, near towns, landfills, and other sources of food and water, populations of ravens and other desert tortoise predators may be elevated. The Service does not support predator control activities in these cases. A more effective way to deal with increased predator populations is to properly manage landfills, water sources, etc. to limit their attractiveness to predators.

43-5 Page 24, Ajo Special Recreation Management Area: Recreational vehicle use of the Ajo area has increased in recent years. This area supports a great diversity of plant and animal species and is adjacent to Organ Pipe National Monument. The Coffee Pot Area of ACEC contains habitat for Acuna cactus (*Echinomastus erectocentrus* var. *acunensis*), a category 1 candidate for Federal listing. Route proliferation is occurring in the Ajo area with accompanying resource damage. The Service recommends that vehicle traffic be limited to designated routes only in this area. Unnecessary routes and routes through areas with sensitive resources or where resource damage is evident should be targeted for closure.

43-8 Page 26, Extended Camping Areas: The text indicates that mitigation is required if an extended camping area is established in category 2 or 3 habitat. However, it does not address category 1 habitat. The Service recommends that no new extended camping areas be established in either category 1 or 2 habitats.

Page 31, Threatened and Endangered Species: We have attached a list of threatened, endangered, and candidate species that may occur in the Lower Gila Resource Area. In particular, note that the cactus ferruginous pygmy-owl is proposed for listing as an endangered species. The document should note that populations of gila topminnow and desert pupfish were established at Peoples Canyon and Tres Alamos; however, these populations may now be extirpated. As with the Yuma Mesa site, these populations are outside of the historic ranges of these species. 43-9 The Service is unaware of any breeding pairs of peregrine falcons in the Lower Gila Resource Area. However, if breeding pairs are documented, we recommend you contact this office to discuss possible effects of the proposed actions. As you know, pursuant to 50 CFR 402.14, the Bureau is required to review its proposed actions to determine whether any listed species may be affected. If such a determination is made, the Bureau must initiate formal consultation with the Service, in accordance with section 7 of the Act. Similarly there are conference provisions for proposed species.

43

43-10 Page 33, Wild Horse and Burros - Alamo Herd Management Area: Wild horses and burros adversely affect riparian areas in a manner similar to grazing by livestock (see discussion above). Additionally, burros will strip bark from young willows, preventing or slowing stand regeneration. Wild horses and burros degrade riparian habitat and may result in increased populations of brown-headed cowbirds and subsequent increased frequency of nest parasitism of native bird species. The Service believes the presence of these animals in riparian areas in the Alamo Herd Management Area may adversely affect the Southwestern willow flycatcher. Pursuant to 50 CFR 402.10, the Bureau must confer with the Service on any action that is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat.

43-1 Appendix A: This section reveals that some actions proposed in previous plans that would have promoted resource protection have been replaced by interdisciplinary team planning. The outcome of this planning process is uncertain and the document provides no direction or objectives upon which the interdisciplinary teams would base their decisions. Examples of where positive resource protection actions have been replaced by interdisciplinary team planning include: 1) protection of cliffs in the Big Horn and Vulture mountains, 2) no new roads in the Eagletail Mountain area, and 3) protection of bighorn sheep lambing areas and a two-mile buffer in the Harquahala and Little Harquahala mountains. If interdisciplinary team planning is necessary to accomplish these actions, the teams should be formed to develop implementation plans only, rather than altering the original intent of the actions.

43-11 Appendix E: The document does not include a map or adequate description of the location and boundaries of the Three Rivers Riparian ACEC; thus, the Service cannot adequately comment on the proposed management goals, objectives, and management prescriptions. The description of the area mentions the Bill Williams and Big Sandy rivers, and Alamo Lake, which appear to be outside of the Lower Gila Resource Area (see map of the document). Proposed actions for the ACEC would benefit nesting bald eagles. A Southwestern willow flycatcher was documented on the Santa Maria River in recent years. This species and its habitat would also benefit from many of the proposed management prescriptions. However, some of the prescriptions are not written in enough detail to evaluate if they will provide adequate protection for bald eagles and Southwestern willow flycatchers. For instance, prescription 14 does not provide enough detail to determine if current detrimental effects of grazing in riparian areas and attraction of cowbirds to Southwestern willow flycatcher habitat attributable to grazing activities will be halted. This issue is of considerable importance because at current population levels, and with continuing threats, extinction of the Southwestern willow flycatcher is foreseeable. Thus, take of individuals, loss of occupied habitat, increased nest parasitism, or loss or modification of adjacent suitable habitat that could support population expansion, further jeopardizes the continued existence of this species. We would like to work with you to expand upon the management prescriptions and develop a plan for the Three Rivers ACEC that will ensure that bald eagles and Southwestern willow flycatchers, as well as other riparian species and values, are adequately protected.

43

We appreciate the opportunity to comment on the draft Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan. Any questions in this matter may be directed to Jim Rorabaugh or Ted Cordery of my staff at 602/640-2720.

Sam F. Spiller

Attachment

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (AES)

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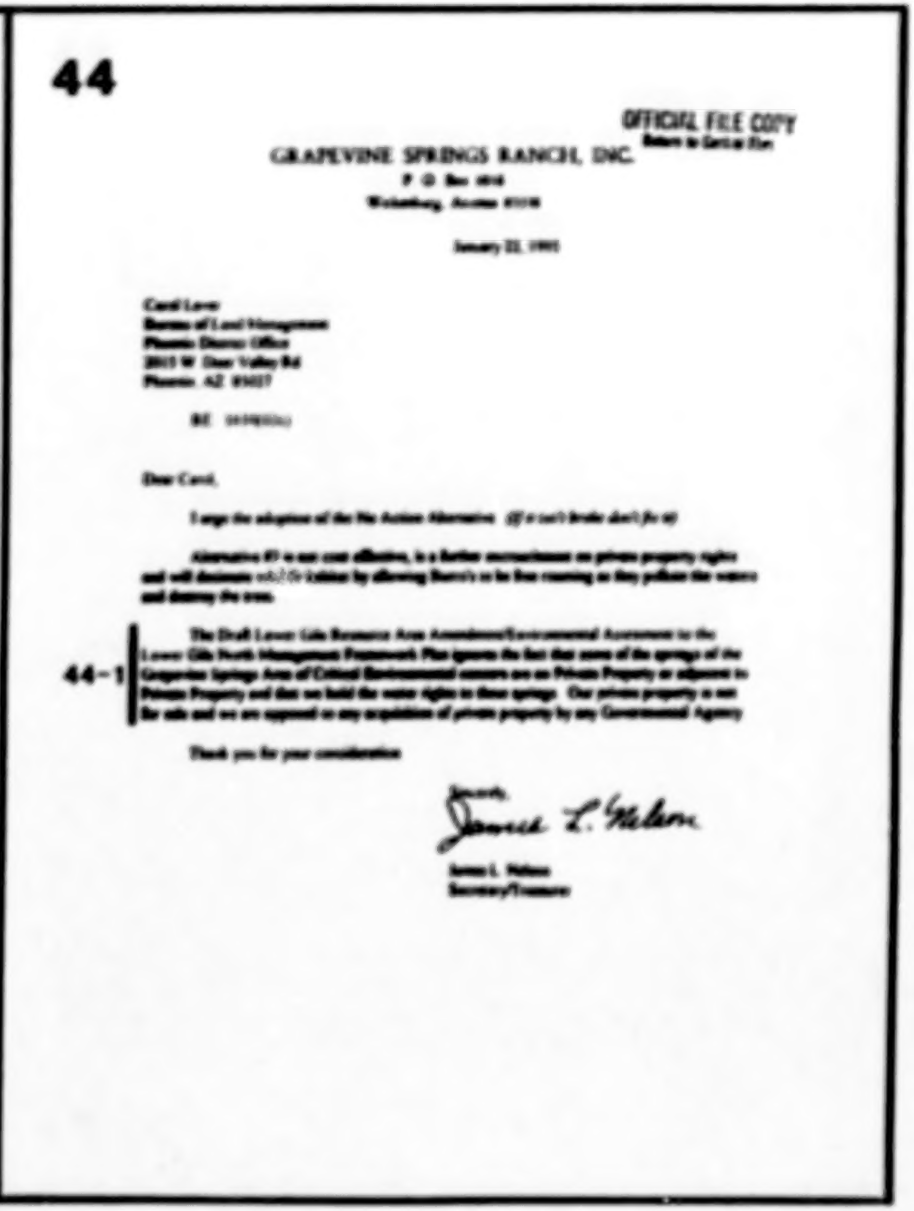

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GRAPEVINE SPRINGS RANCH, INC.
P O Box [illegible]
Wickenburg, Arizona [illegible]

January [illegible]

Carol Love
Bureau of Land Management
Phoenix District Office
2015 W Deer Valley Rd
Phoenix AZ 85027

RE [illegible]

Dear Carol,

I urge the adoption of the No Action Alternative. *(If it isn't broke don't fix it)*

Alternative #[illegible] is not cost effective, is a further encroachment on private property rights and will decimate wildlife habitat by allowing Burro's to be free roaming as they pollute the waters and destroy the area.

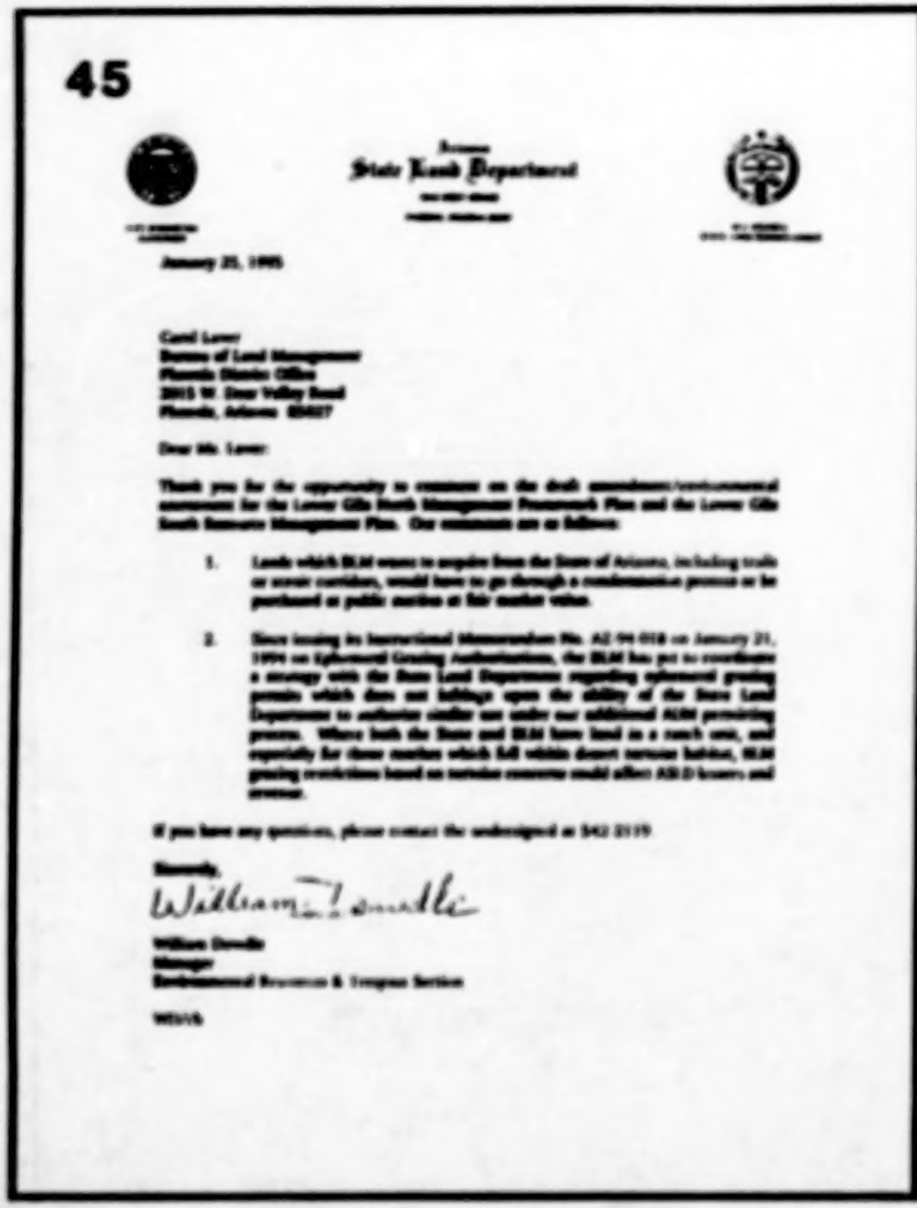
44-1 The Draft Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North Management Framework Plan ignores the fact that some of the springs of the Grapevine Springs Area of Critical Environmental concern are on Private Property or adjacent to Private Property and that we hold the water rights to these springs. Our private property is not for sale and we are opposed to any acquisition of private property by any Governmental Agency

Thank you for your consideration

Sincerely,

Janice L. Nelson
Secretary/Treasurer

**45**



Arizona
State Land Department

January 25, 1995

Carol Lever
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, Arizona 85027

Dear Ms. Lever:

Thank you for the opportunity to comment on the draft amendment/environmental assessment for the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan. Our comments are as follows:

1. Lands which BLM wants to acquire from the State of Arizona, including trails or scenic corridors, would have to go through a condemnation process or be purchased at public auction at fair market value.

2. Since issuing its Instructional Memorandum No. AZ-94-018 on January 21, 1994 on Ephemeral Grazing Authorizations, the BLM has yet to coordinate a strategy with the State Land Department regarding ephemeral grazing permits which does not infringe upon the ability of the State Land Department to authorize similar use under our additional AUM permitting process. Where both the State and BLM have land in a ranch unit, and especially for those ranches which fall within desert tortoise habitat, BLM grazing restrictions based on tortoise concerns could affect ASLD lessees and revenue.

If you have any questions, please contact the undersigned at 542-2119.

Sincerely,

William Dowdle

William Dowdle
Manager
Environmental Resources & Trespass Section

WD:rh

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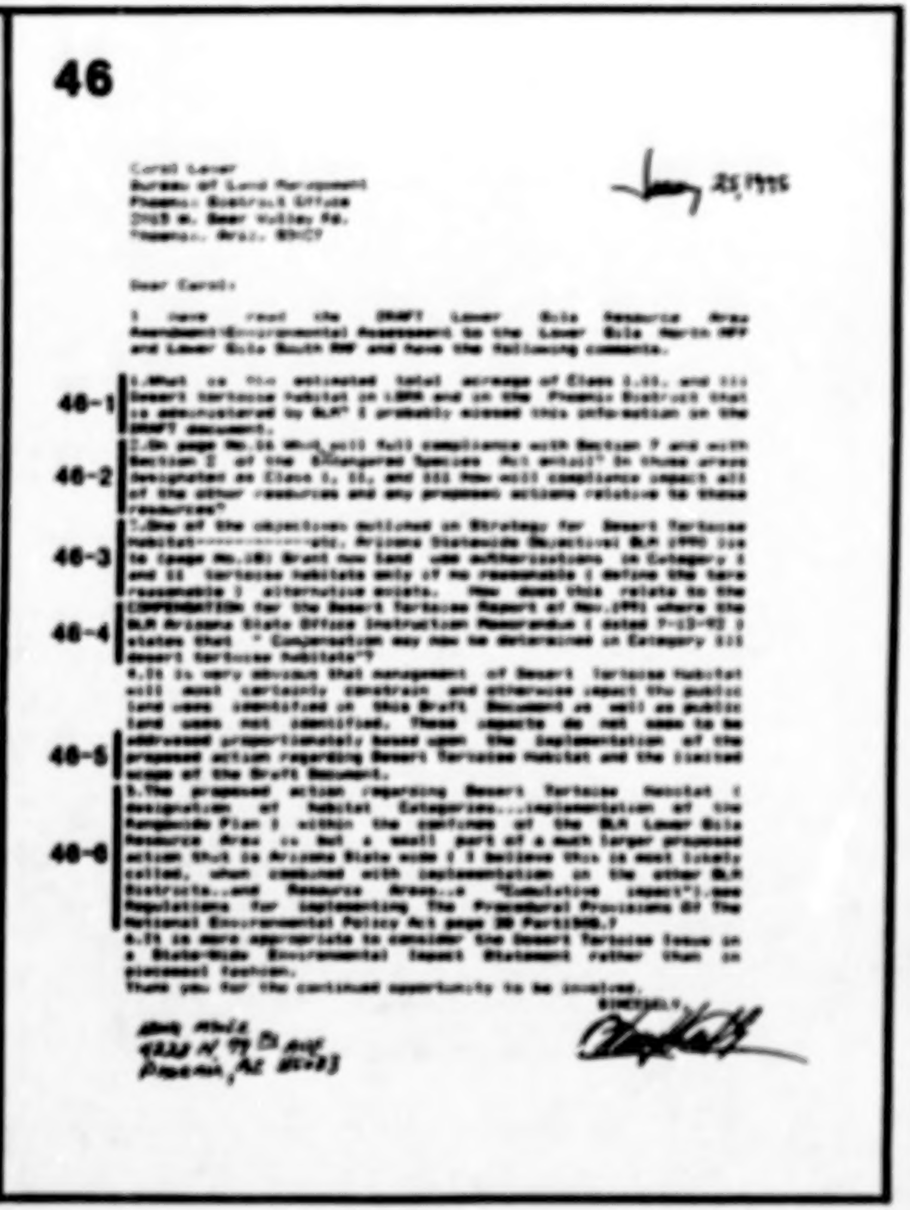
**46**



Carol Lever
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, Ariz. 85027

Jan 25, 1995

Dear Carol:

I have read the DRAFT Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North MFP and Lower Gila South RMP and have the following comments.

46-1 1.What is the estimated total acreage of Class I,II, and III Desert tortoise habitat in LGRA and in the Phoenix District that is administered by BLM? I probably missed this information in the DRAFT document.

46-2 2.On page No.16 What will full compliance with Section 7 and with Section 2 of the Endangered Species Act entail? In those areas designated as Class I, II, and III How will compliance impact all of the other resources and any proposed actions relative to these resources?

46-3 3.One of the objectives outlined in Strategy for Desert Tortoise Habitat--------------etc. Arizona Statewide Objective: BLM 1990 (as to (page No.18) Grant new land use authorizations in Category I and II tortoise habitats only if no reasonable ( define the term reasonable ) alternative exists. 46-4 How does this relate to the COMPENSATION for the Desert Tortoise Report of Nov.1991 where the BLM Arizona State Office Instruction Memorandum ( dated 7-13-92 ) states that " Compensation may now be determined in Category III desert tortoise habitats"?

4.It is very obvious that management of Desert Tortoise Habitat will most certainly constrain and otherwise impact the public land uses identified in this Draft Document as well as public land uses not identified. 46-5 These impacts do not seem to be addressed proportionately based upon the implementation of the proposed action regarding Desert Tortoise Habitat and the limited scope of the Draft Document.

46-6 5.The proposed action regarding Desert Tortoise Habitat ( designation of habitat Categories...implementation of the Rangewide Plan ) within the confines of the BLM Lower Gila Resource Area is but a small part of a much larger proposed action that is Arizona State wide ( I believe this is most likely called, when combined with implementation in the other BLM Districts...and Resource Areas...a "Cumulative impact").see Regulations for Implementing The Procedural Provisions Of The National Environmental Policy Act page 30 Part1508.7

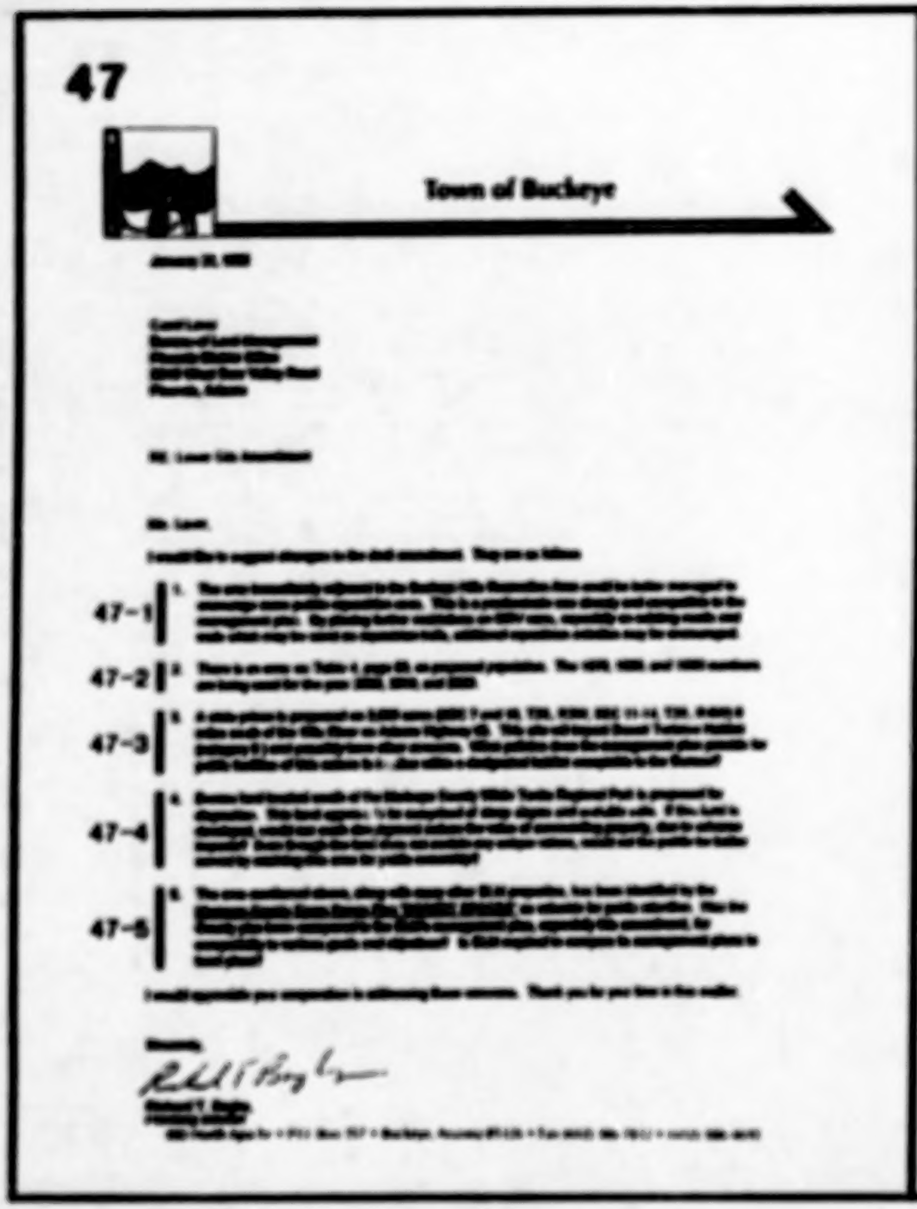
6.It is more appropriate to consider the Desert Tortoise Issue in a State-Wide Environmental Impact Statement rather than in piecemeal fashion.

Thank you for the continued opportunity to be involved.

Sincerely,

[illegible]
4322 N. 79th Ave
Phoenix, AZ 85033

**47**



Town of Buckeye

[illegible]

47-1 1. [illegible]

47-2 2. [illegible]

47-3 3. [illegible]

47-4 4. [illegible]

47-5 5. [illegible]

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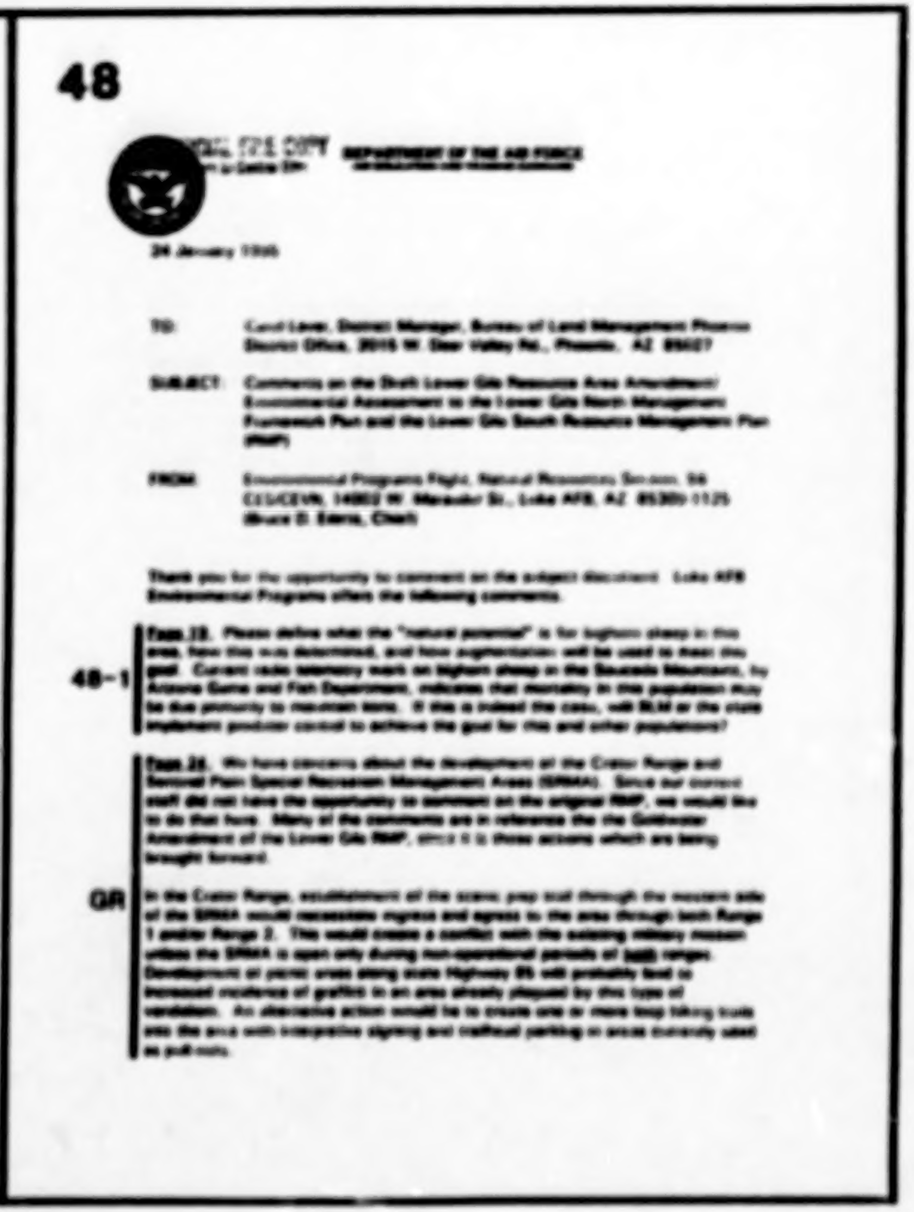

DEPARTMENT OF THE AIR FORCE

24 January 1995

TO: Carol [illegible], District Manager, Bureau of Land Management Phoenix District Office, 2015 W. Deer Valley Rd., Phoenix, AZ 85027

SUBJECT: Comments on the Draft Lower Gila Resource Area Amendment/ Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan (RMP)

FROM: Environmental Programs Flight, Natural Resources Section, 56 CES/CEVN, 14002 W. Marauder St., Luke AFB, AZ 85309-1125 (Bruce D. [illegible], Chief)

Thank you for the opportunity to comment on the subject document. Luke AFB Environmental Programs offers the following comments.

48-1 Page 13. Please define what the "natural potential" is for bighorn sheep in this area, how this was determined, and how augmentation will be used to meet this goal. Current radio telemetry work on bighorn sheep in the Sauceda Mountains, by Arizona Game and Fish Department, indicates that mortality in this population may be due primarily to mountain lions. If this is indeed the case, will BLM or the state implement predator control to achieve the goal for this and other populations?

Page 24. We have concerns about the development of the Crater Range and Sentinel Plain Special Recreation Management Areas (SRMA). Since our current staff did not have the opportunity to comment on the original RMP, we would like to do that here. Many of the comments are in reference the the Goldwater Amendment of the Lower Gila RMP, since it is those actions which are being brought forward.

GR In the Crater Range, establishment of the scenic jeep trail through the western side of the SRMA would necessitate ingress and egress to the area through both Range 1 and/or Range 2. This would create a conflict with the existing military mission unless the SRMA is open only during non-operational periods of both ranges. Development of picnic areas along state Highway 85 will probably lead to increased incidence of graffiti in an area already plagued by this type of vandalism. An alternative action would be to create one or more loop hiking trails into the area with interpretive signing and trailhead parking in areas currently used as pull-outs.

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Development of the Sentinel Plain SRMA would pose similar problems. If existing roads are not properly fenced, gated, and signed, visitors have the potential for entering the down-range end of Range 4 or entering into the North Tactical Range. This would pose a significant health and safety risk to visitors and interrupt military training activities. Currently, signs and fencing along the designated BMGR border in the Sentinel area are insufficient or lacking entirely.

GR Page 25. While we are not opposed to development of a SRMA in the Ajo area, we have a suggestion for development of recreational facilities within the proposed boundary. The block of land north of Ajo at the base of Childs Mountain, which contains the remains of the Ajo Air Force radar facility housing area, is currently used for outdoor recreational activities such as ORV use, camping, and shooting. No developed facilities exist in the area, and as a result, other activities such as illegal dumping are in evidence. Establishment of the area as a designated outdoor recreation area with camping areas, picnic areas, and a shooting range may serve to discourage illegal activity and provide recreational opportunity at the same time.

48-2 Page 21. Under Goldwater Range: '[illegible]' should be spelled '[illegible]'

Once again, thank you for the opportunity to review the proposed amendments. If you have any questions concerning our comments, please contact Mr. Bob Barry, Natural Resources Program Manager at telephone (602) 856-3823.

Bruce D. Eilerts

Bruce D. Eilerts

cc: Superintendent, Organ Pipe Cactus National Monument
Resource Area Manager, Lower Gila Resource Area, Bureau of Land Management, Phoenix, AZ
State Director, Bureau of Land Management, Phoenix, AZ
Refuge Manager, Cabeza Prieta National Wildlife Refuge, Ajo, AZ
State Supervisor, Arizona Ecological Services State Office, Phoenix, AZ

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**49**

**Joseph M. Feller**

*College of Law*
Arizona State University
Tempe, AZ 85287-7906
(602) 965-2904

January 25, 1995

Ms. Carol Lever
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, AZ 85027

Re: Draft Environmental Assessment of Proposed Amendments to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan

Dear Ms. Lever,

The following are my comments on the above named environmental assessment (EA). These comments are my professional opinions. They do not necessarily reflect the views of Arizona State University or the College of Law.

Thomas Lustig, attorney for the National Wildlife Federation, has asked me to inform you that the National Wildlife Federation joins and concurs in these comments.

Summary

The proposed amendments dealing with the desert tortoise and with wild horses and burros should be a source of shame and embarrassment to the BLM. These amendments would remove resource protection measures from existing land use plans and replace them with general policy statements that are taken from statutes or statewide directives. The proposed amendments would also remove important limitations on intense recreational use, roads, and off-road vehicles. Further, the EA completely fails to analyze the environmental impacts of removing the protective measures contained in the existing plans. Finally, the proposed amendments are grossly deficient in that they fail to address critical issues regarding livestock grazing.

### The Proposed Amendments Would Remove Protective Measures Regarding the Desert Tortoise, Wild Horses and Burros, Recreational Use, Roads, and Off-Road Vehicles.

The purpose of a BLM land use plan is to translate general policy direction found in statutes, regulations, and national and statewide directives into specific management prescriptions tailored to the particular characteristics of the planning area. The existing land use plans for the Lower Gila North and Lower Gila South planning areas, though deficient and outdated in many respects, nonetheless contain at least some of the types of specific management prescriptions that protect resources and make a land use plan meaningful and useful. With respect to the desert tortoise and wild horses and burros, the proposed amendments would remove these provisions, leaving a meaningless, empty shell. The proposed amendments would also remove important limitations on intense recreational use, roads, and off-road vehicles.

Appendix A to the EA reveals that specific protective measures that would be removed by the proposed amendments include the following:

- Direction to rest desert tortoise habitat from livestock use between February and July on allotments with intensive management.

49-1 - Direction to adjust livestock use on the Ohaco Allotment.

- Direction to maintain the number of burros in the Alamo herd at 200.

- Direction to protect bighorn sheep lambing areas and a two-mile buffer in the Harquahala Mountains from burros, intense recreational use, off-highway vehicles, and other disturbances.

- Direction to remove burros and reduce livestock concentrations at waters in the Big Horn, Granite Wash, and Harquahala Mountains to protect big game.

- Direction to exclude burros and livestock from four water tanks to protect waterfowl and long-eared owl nests.

- Direction to protect cliffs and a two-mile buffer zone in the Bighorn and Vulture Mountains from burro overuse and from intense recreational use or development.

- Direction to restrict use or development incompatible with protection of sensitive areas in the Harquahala Mountains.

- Direction to disallow new roads in the Saddle Mountain area.

The proposed amendments would replace these specific management prescriptions either with nothing or with general policy statements taken from statutes or statewide directives. With respect to the above-listed limitations on recreational use, roads, and off-road vehicles, the draft EA states only that "Interdisciplinary planning will be conducted to determine future actions." EA at 62, 63. In other words, direction on these issues is simply being dropped from the land use plans.

49-1 With respect to the limitations on burro populations and locations, the proposed amendments would replace specific prescriptions with general direction to maintain "self-sustaining populations which contain the optimum number of wild burros in a thriving natural ecological balance." EA at 19. This language is simply a paraphrase of similar language in the Wild Free-Roaming Horses and Burros Act. In other words, the amended land use plan will be completely devoid of content on this issue; it will simply restate existing law.

With respect to the desert tortoise, the proposed amendments would insert provisions copied from the statewide desert tortoise strategy adopted in 1990 and general statements about how the Lower Gila Resource Area intends to implement the strategy. These statements contain no adequate substitute for the specific seasonal restriction on livestock grazing in tortoise habitat that is being removed from the existing Lower Gila North Management Framework Plan.

### The EA Does Not Evaluate the Environmental Impacts of the Proposed Amendments.

49-2 By removing protective measures from existing land use plans, the proposed amendments may have substantial negative environmental impacts. For example, the proposed amendments will allow spring and summer cattle grazing in desert tortoise habitat that is disallowed by the existing Lower Gila North Management Framework (MFP). The proposed amendments will allow unlimited numbers of burros to remain in the Alamo Herd Area unless and until monitoring of their impacts is completed. And the amendments will allow burros, concentrations of livestock, and intense recreational use and development to occur in sensitive areas where they are disallowed by the existing land use plans. The removal of these restrictions may well cause significant environmental impacts that would require the preparation of an EIS.

The EA does not address these impacts at all. It is therefore inadequate

### The Proposed Amendments Unreasonably Allow Resource Damage to Continue and Increase Indefinitely Pending the Completion of Unspecified Monitoring Which May Never Be Completed.

49-3 On page 19, the EA states that, for wild horses and burros, "interdisciplinary habitat monitoring shall be initiated to establish what constitutes a thriving ecological balance." On page 60, the EA states that "[c]hanges in livestock operations will be made if monitoring indicates the need to protect tortoise habitat." In neither case does the EA contain any indication of what will be monitored, any monitoring plan or schedule, any standards against which the monitoring data will be evaluated, or any specification of what action will be taken if the monitoring results indicate an unacceptable situation. Nor is there any assurance that funding or personnel will be available to perform the necessary monitoring in a timely fashion.

The reliance on monitoring appears to be a fantasy. Everyone knows that the BLM lacks the funds and the personnel to perform even the most basic monitoring tasks. The monitoring required to evaluate changes in desert tortoise habitat and to "establish what constitutes a thriving ecological balance" would be extensive, complex, costly, and lengthy. I doubt that the BLM even knows what would be required. And the BLM certainly does not have the funds or the personnel to perform the monitoring.

On the other hand, the BLM already knows that overgrazing has seriously affected tortoise populations (see Draft Lower Gila North Grazing Environmental Impact Statement, 1981), and that wild burro numbers are increasing at an alarming rate. It is irresponsible of the BLM to propose to do nothing about these problems pending the completion of monitoring that may never be completed.

Since monitoring may never be completed, the most important decision that the BLM must make is how to manage resources in the absence of complete monitoring data. The proposed amendments would allow unlimited numbers of burros and continued uncontrolled grazing by livestock. This approach is unconscionable.

### The Proposed Amendments Unreasonably Fail to Address Critical Issues Concerning Livestock Grazing in the Planning Area.

Grazing in the Lower Gila North planning area was last systematically addressed in the Lower Gila North Grazing Environmental Impact Statement (LGNGEIS), published in 1982. The LGNGEIS is hopelessly outdated. Important developments since the publication of the LGNGEIS include the following:

- Acquisition by BLM, through land exchanges, of large tracts of environmentally sensitive land in Arizona with important wildlife habitat and recreational values.

- Greatly expanding demands for non-commodity uses of BLM lands in Arizona, including recreation, hunting, fishing, and wildlife viewing.

- Designation of over one million acres of wilderness on BLM land in Arizona.

- New state and national BLM policies requiring protection and enhancement of riparian areas.

49-4 - Decreased economic viability of open range livestock grazing on desert lands.

- Designation of additional threatened and endangered species that are detrimentally affected by livestock grazing.

- Increased scientific knowledge of the adverse impacts of livestock grazing on plants, animals, and ecosystems.

- Increased public sensitivity to the adverse impacts of livestock grazing on public lands.

- New requirements imposed by the administration's Rangeland Reform initiative.

- Clarification by an Administrative Law Judge that FLPMA's principle of "multiple use" requires the BLM to weigh and balance the harms and benefits of livestock grazing on particular parcels of public lands to determine where grazing is in the public interest and where it is not (see National Wildlife Federation v. BLM, No. UT-06-91-1 -- the Comb Wash case).

Financial inability of the BLM to perform comprehensive, systematic rangeland monitoring.

- A report by the U.S. General Accounting Office revealing the failure of the

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BLM's grazing program in hot desert areas.

In light of all these developments, there is a critical need for the BLM to take a new look at grazing in the Lower Gila Resource Area. The LGNGEIS contains no evaluation at all of the relative harms and benefits of grazing on particular areas of land within the Resource Area. Although it included a blanket no-grazing alternative for the whole Resource Area, the LGNGEIS did not even consider the possibility of selectively eliminating grazing in areas of particular ecological or recreational value and sensitivity, or in areas that are especially poorly suited to livestock grazing.

49-4 The lack of up-to-date planning for livestock grazing has led to intense, time-consuming conflicts in areas such as the Santa Maria Ranch. BLM officials, from the State Director to the former Area Manager, have all told me that the land use planning process is the appropriate forum to resolve these issues, and that they would be addressed in upcoming land use planning for the Lower Gila Resource Area. It is a bitter disappointment to see that the proposed amendments do not address livestock grazing at all.

I strongly urge you to expand the scope of the proposed amendments to include management of livestock grazing, including the critical issue of which lands should be closed to livestock grazing.

Thank you for considering these comments. If you have any questions, please feel free to call me. I am currently on sabbatical leave in Boulder, Colorado, where my home number is (303) 786-8001. After May 1, 1995, I will be back in Arizona, where my permanent phone number is (602) 965-3984.

Sincerely yours,

Joe Feller

Joseph M. Feller

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**SIERRA CLUB**

**Grand Canyon Chapter - Arizona**

Palo Verde Group
2508 E. Heatherbrae
Phx., Az. 85016

Carol Lever
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phx., Az. 85027

Jan. 27, 1995

Dear Carol Lever,

Thanks for the opportunity to comment on your Lower Gila Resource Area Amendment/Environmental Assessment Plan. We appreciate the open houses held to discuss the actions proposed. Here are our comments on these issues.

Land Tenure Adjustment

Reducing the total lands offered for disposal from approximately 43,000 to 45,000 acres as outlined in the proposed amendments is a step in the right direction. Establishment of Management Area Boundarys seems to give some sense of order to the process of consolidating BLM inholdings. Disposal of some BLM lands near metropolitan areas, however, should perhaps be reexamined.

50-1 White Tank Mountain Regional Park covers roughly about one half of the White Tank mountain range, the southern half and some of the west facing slopes are still identified for disposal. Future housing construction on these mountains would negatively impact the park, and probably would precipitate a "McDowell Mountains of the West" situation with preservationists put in the position of having to purchase the land at inflated prices after speculators bid up the price. Once again the public could lose an important amenity while a few profit. If disposal of these mountains are someday necessary, hopefully some arrangement could be made whereby the buyer would be someone other than a housing developer so the entire range could be protected.

Desert Tortoise Habitat Management

50-2 The proposed amendment talks of considering the forage needs of desert tortoise and refers to the objectives in your 1990 "Strategy for Desert Tortoise Habitat On Public Lands in Arizona" as providing guidelines, but the amendment does not discuss the

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50-2 specifics of how much forage is required and at what times of the year that forage is crucial for the tortoise. The amendments only say that ephemeral grazing will continue to be permitted, and maps for on the Category I,II, and III areas.

Desert Bighorn Sheep Augmentation and Reestablishment

Care should be taken that sheep reintroductions do not exceed the carrying capacity of the land. Some mountain ranges in the Lower Gila Resource Area are now islands surrounded by agriculture and development and may not sustain high populations and might conflict with other resource values.

Wild Horse and Burro Management

The proposed amendment now recognizes the de facto existence of burro herds in the Harquahala, Little Harquahala, and Painted Rock areas and proposes to manage them as self-sustaining populations in a "thriving ecological balance with other system components." Four burro herds should be enough. Burros that eventually disperse to other additional areas should not constitute new herd areas, and should be managed accordingly.

Recreation Management

50-3 The word "trails" in reference to OHV routes (p.20) should be eliminated to read "existing and/or designated roads and traditional or historically used vehicle routes..."

50-4 Additionally, two ACEC areas, Vekol Valley and Coffeepot Botanical Area will change from closed to "limited to designated routes only." While such a change might be warranted, your document offers no discussion of adverse impacts the new designation might incur. The only discussion is to the effect that continued closure of the ACEC's was opposed by some in the scoping process. We approve the concept to designate portions of the Big Sandy, Bill Williams, and the Santa Maria as the Three Rivers Riparian ACEC.

GR The document proposes to build at least one long term visitor area capable of supporting 100 to 500 recreational vehicles, probably in one of the four "special" recreation areas designated in the plan. We are not convinced of the need for BLM to compete with private RV facilities, when some operators already complain about the difficulty of competing with federally subsidized projects.

The document proposes additional "extended camping areas" that would accommodate 20 to 50 RV's in the "special" recreation areas, one such area being Saddle Mountain. Such a facility, while being tempting due to its geographical location, would be a problem because of the mountain's cultural resource values, Category II tortoise habitat, and BLM's current plan for large numbers of bighorn sheep. Saddle Mountain should be viewed as an area threatened from urban sprawl and human impact, and strategies should be devised to minimize these impacts, not increase them. Existing roads should be closed to protect the

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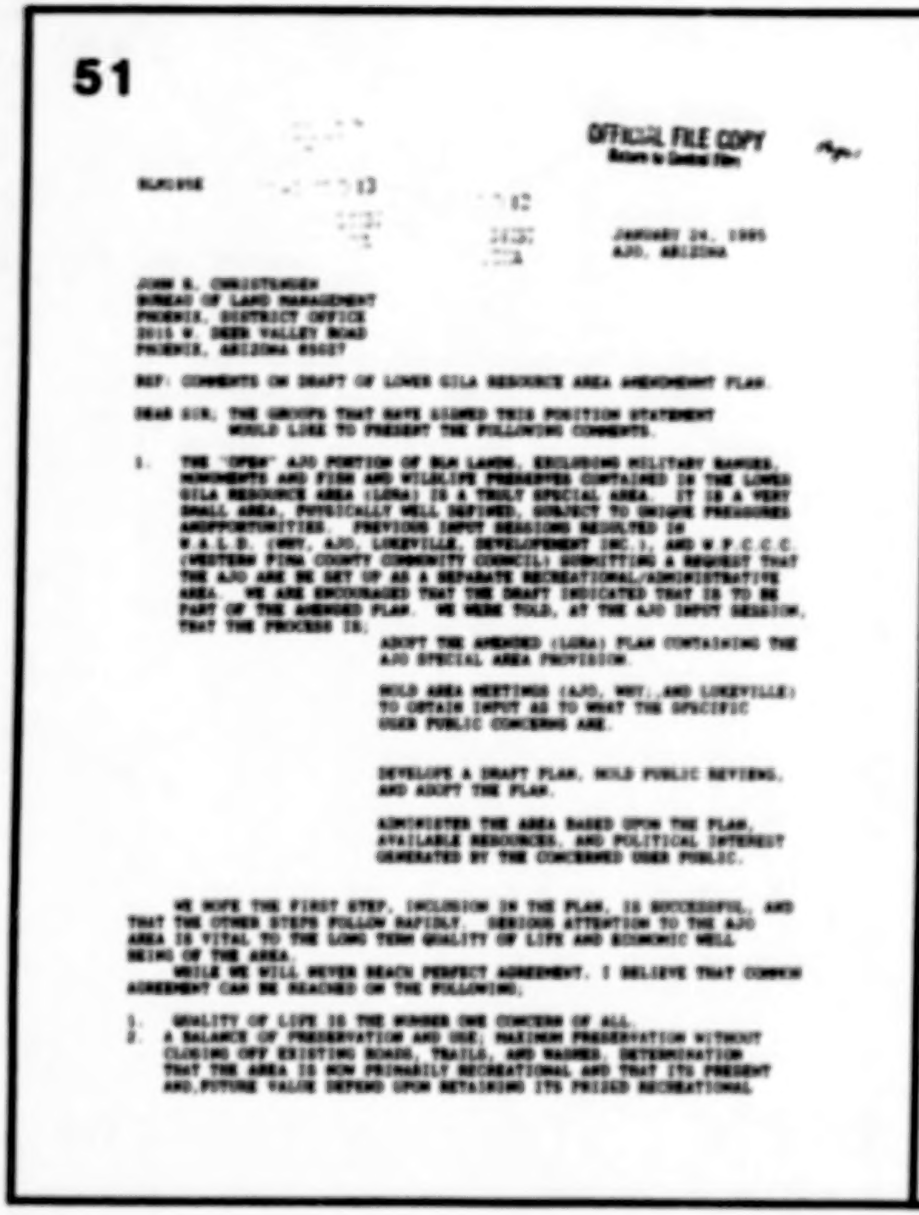
GR petroglyph site and wildlife, and care should be given in the disposal of land outside the management area so that impacts to the mountain are minimized. Your language about designating short term camping recreation areas "only where such use promotes resource protection and where all conditions can be mitigated" should apply to long term and extended areas as well. Interpretive centers, such as the one recently built at the rest area along the Hassayampa below Wickenburg, should be considered when recreation areas are developed.

Please mail a copy of your final document to my address.

yours,

Don Steuter
Conservation Chair



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JANUARY 24, 1985
AJO, ARIZONA

JOHN R. CHRISTENSEN
BUREAU OF LAND MANAGEMENT
PHOENIX, DISTRICT OFFICE
2015 W. DEER VALLEY ROAD
PHOENIX, ARIZONA 85027

REF: COMMENTS ON DRAFT OF LOWER GILA RESOURCE AREA AMENDMENT PLAN.

DEAR SIR, THE GROUPS THAT HAVE SIGNED THIS POSITION STATEMENT WOULD LIKE TO PRESENT THE FOLLOWING COMMENTS.

1. THE "OPEN" AJO PORTION OF BLM LANDS, EXCLUDING MILITARY RANGES, MONUMENTS AND FISH AND WILDLIFE PRESERVES CONTAINED IN THE LOWER GILA RESOURCE AREA (LGRA) IS A TRULY SPECIAL AREA. IT IS A VERY SMALL AREA, PHYSICALLY WELL DEFINED, SUBJECT TO UNIQUE PRESSURES ANDOPPORTUNITIES. PREVIOUS INPUT SESSIONS RESULTED IN W.A.L.D. (WHY, AJO, LUKEVILLE, DEVELOPMENT INC.), AND W.P.C.C.C. (WESTERN PIMA COUNTY COMMUNITY COUNCIL) SUBMITTING A REQUEST THAT THE AJO ARE BE SET UP AS A SEPARATE RECREATIONAL/ADMINISTRATIVE AREA. WE ARE ENCOURAGED THAT THE DRAFT INDICATED THAT IS TO BE PART OF THE AMENDED PLAN. WE WERE TOLD, AT THE AJO INPUT SESSION, THAT THE PROCESS IS;

ADOPT THE AMENDED (LGRA) PLAN CONTAINING THE AJO SPECIAL AREA PROVISION.

HOLD AREA MEETINGS (AJO, WHY, AND LUKEVILLE) TO OBTAIN INPUT AS TO WHAT THE SPECIFIC USER PUBLIC CONCERNS ARE.

DEVELOPE A DRAFT PLAN, HOLD PUBLIC REVIEWS, AND ADOPT THE PLAN.

ADMINISTER THE AREA BASED UPON THE PLAN, AVAILABLE RESOURCES, AND POLITICAL INTEREST GENERATED BY THE CONCERNED USER PUBLIC.

WE HOPE THE FIRST STEP, INCLUSION IN THE PLAN, IS SUCCESSFUL, AND THAT THE OTHER STEPS FOLLOW RAPIDLY. SERIOUS ATTENTION TO THE AJO AREA IS VITAL TO THE LONG TERM QUALITY OF LIFE AND ECONOMIC WELL BEING OF THE AREA.

WHILE WE WILL NEVER REACH PERFECT AGREEMENT, I BELIEVE THAT COMMON AGREEMENT CAN BE REACHED ON THE FOLLOWING;

1. QUALITY OF LIFE IS THE NUMBER ONE CONCERN OF ALL.
2. A BALANCE OF PRESERVATION AND USE; MAXIMUM PRESERVATION WITHOUT CLOSING OFF EXISTING ROADS, TRAILS, AND WASHES. DETERMINATION THAT THE AREA IS NOW PRIMARILY RECREATIONAL AND THAT ITS PRESENT AND FUTURE VALUE DEPEND UPON RETAINING ITS PRIZED RECREATIONAL

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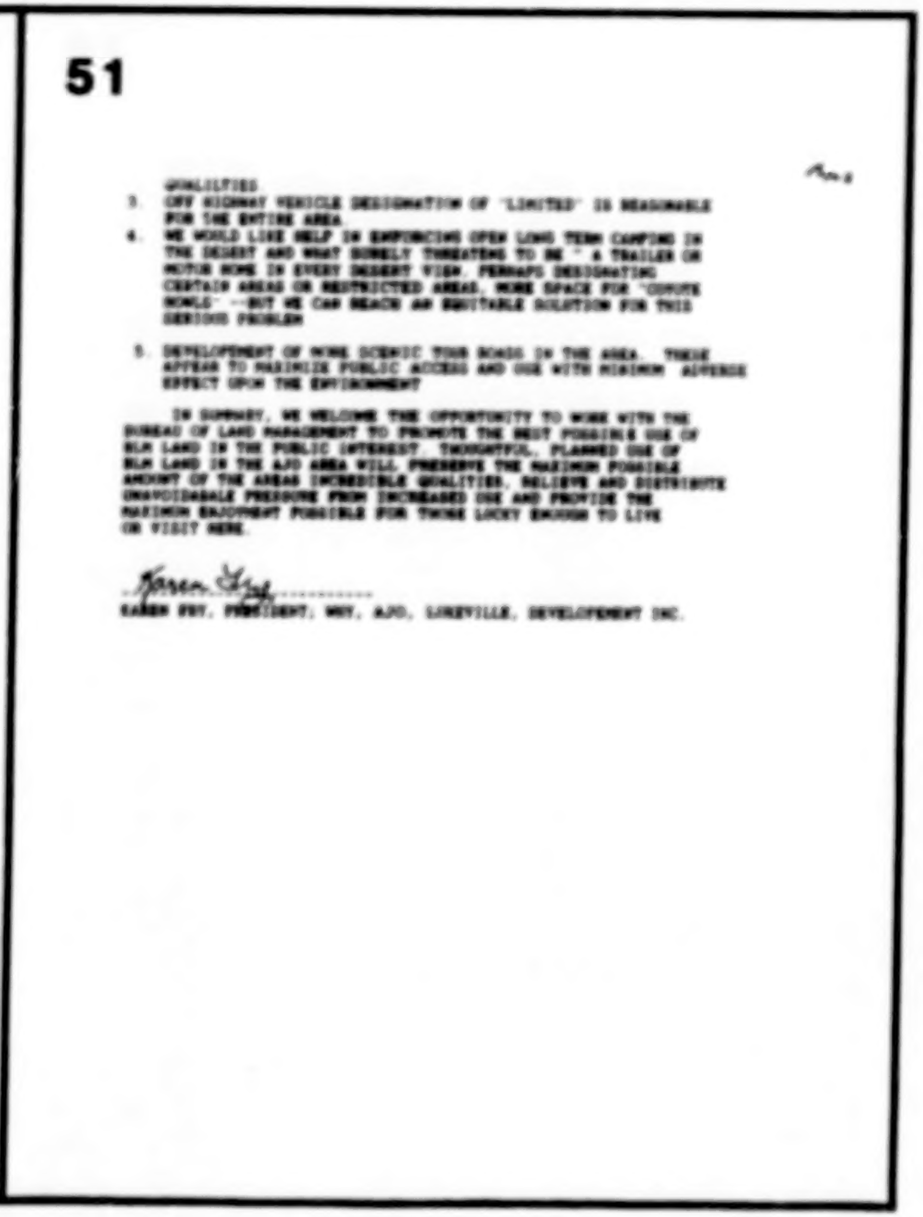

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QUALITIES
3. OFF HIGHWAY VEHICLE DESIGNATION OF "LIMITED" IS REASONABLE FOR THE ENTIRE AREA.
4. WE WOULD LIKE HELP IN ENFORCING OPEN LONG TERM CAMPING IN THE DESERT AND WHAT SURELY THREATENS TO BE " A TRAILER OR MOTOR HOME IN EVERY DESERT VIEW. PERHAPS DESIGNATING CERTAIN AREAS OR RESTRICTED AREAS, MORE SPACE FOR "COYOTE HOWLS" --BUT WE CAN REACH AN EQUITABLE SOLUTION FOR THIS SERIOUS PROBLEM

5. DEVELOPMENT OF MORE SCENIC TOUR ROADS IN THE AREA. THESE APPEAR TO MAXIMIZE PUBLIC ACCESS AND USE WITH MINIMUM ADVERSE EFFECT UPON THE ENVIRONMENT

IN SUMMARY, WE WELCOME THE OPPORTUNITY TO WORK WITH THE BUREAU OF LAND MANAGEMENT TO PROMOTE THE BEST POSSIBLE USE OF BLM LAND IN THE PUBLIC INTEREST. THOUGHTFUL, PLANNED USE OF BLM LAND IN THE AJO AREA WILL PRESERVE THE MAXIMUM POSSIBLE AMOUNT OF THE AREAS INCREDIBLE QUALITIES, RELIEVE AND DISTRIBUTE UNAVOIDABALE PRESSURE FROM INCREASED USE AND PROVIDE THE MAXIMUM ENJOYMENT POSSIBLE FOR THOSE LUCKY ENOUGH TO LIVE OR VISIT HERE.

Karen Fry
KAREN FRY, PRESIDENT, WHY, AJO, LUKEVILLE, DEVELOPMENT INC.

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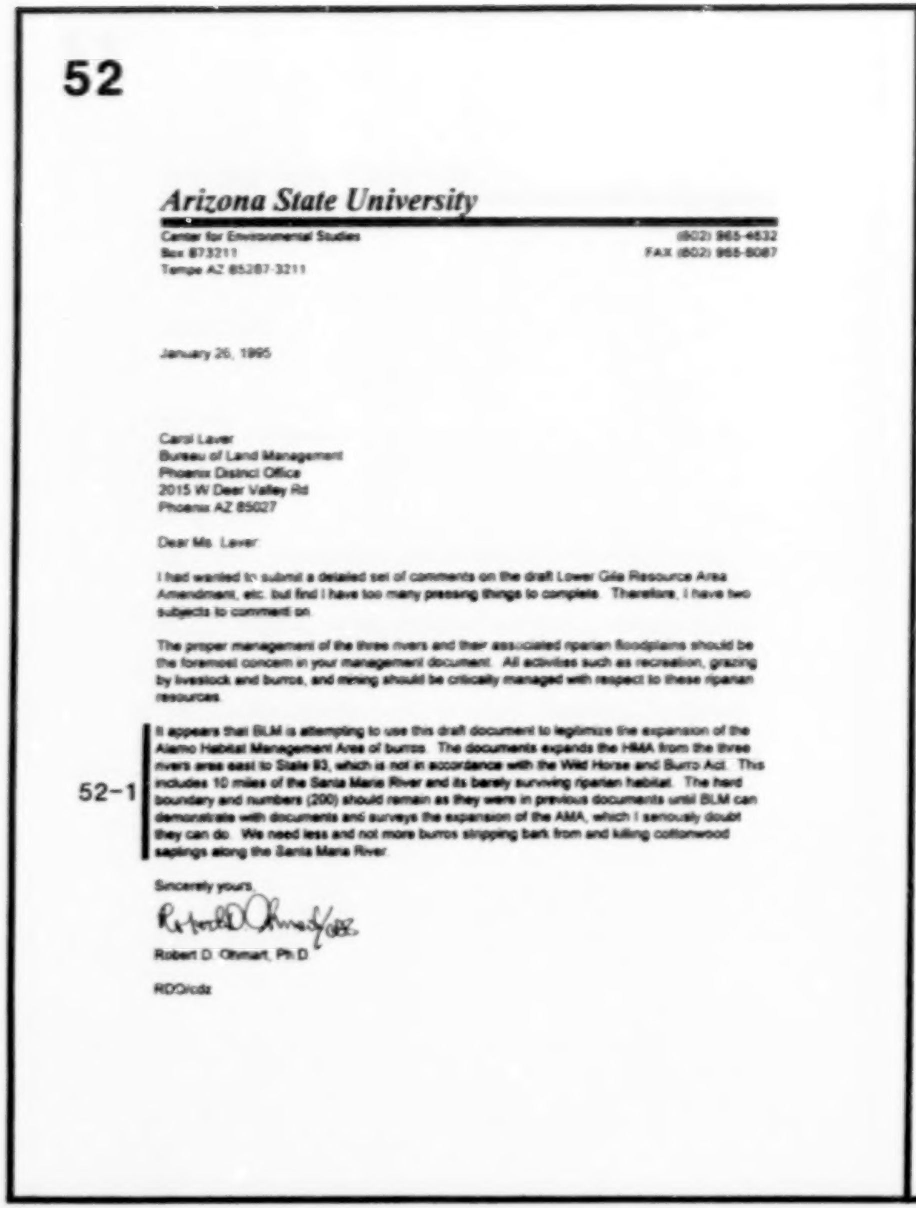

**52**

*Arizona State University*
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Box 873211
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January 26, 1995

Carol Laver
Bureau of Land Management
Phoenix District Office
2015 W Deer Valley Rd
Phoenix AZ 85027

Dear Ms. Laver:

I had wanted to submit a detailed set of comments on the draft Lower Gila Resource Area Amendment, etc. but find I have too many pressing things to complete. Therefore, I have two subjects to comment on.

The proper management of the three rivers and their associated riparian floodplains should be the foremost concern in your management document. All activities such as recreation, grazing by livestock and burros, and mining should be critically managed with respect to these riparian resources.

52-1 It appears that BLM is attempting to use this draft document to legitimize the expansion of the Alamo Habitat Management Area of burros. The documents expands the HMA from the three rivers area east to State 93, which is not in accordance with the Wild Horse and Burro Act. This includes 10 miles of the Santa Maria River and its barely surviving riparian habitat. The herd boundary and numbers (200) should remain as they were in previous documents until BLM can demonstrate with documents and surveys the expansion of the AMA, which I seriously doubt they can do. We need less and not more burros stripping bark from and killing cottonwood saplings along the Santa Maria River.

Sincerely yours,

Robert D. Ohmart/cdz

Robert D. Ohmart, Ph.D.

RDO/cdz

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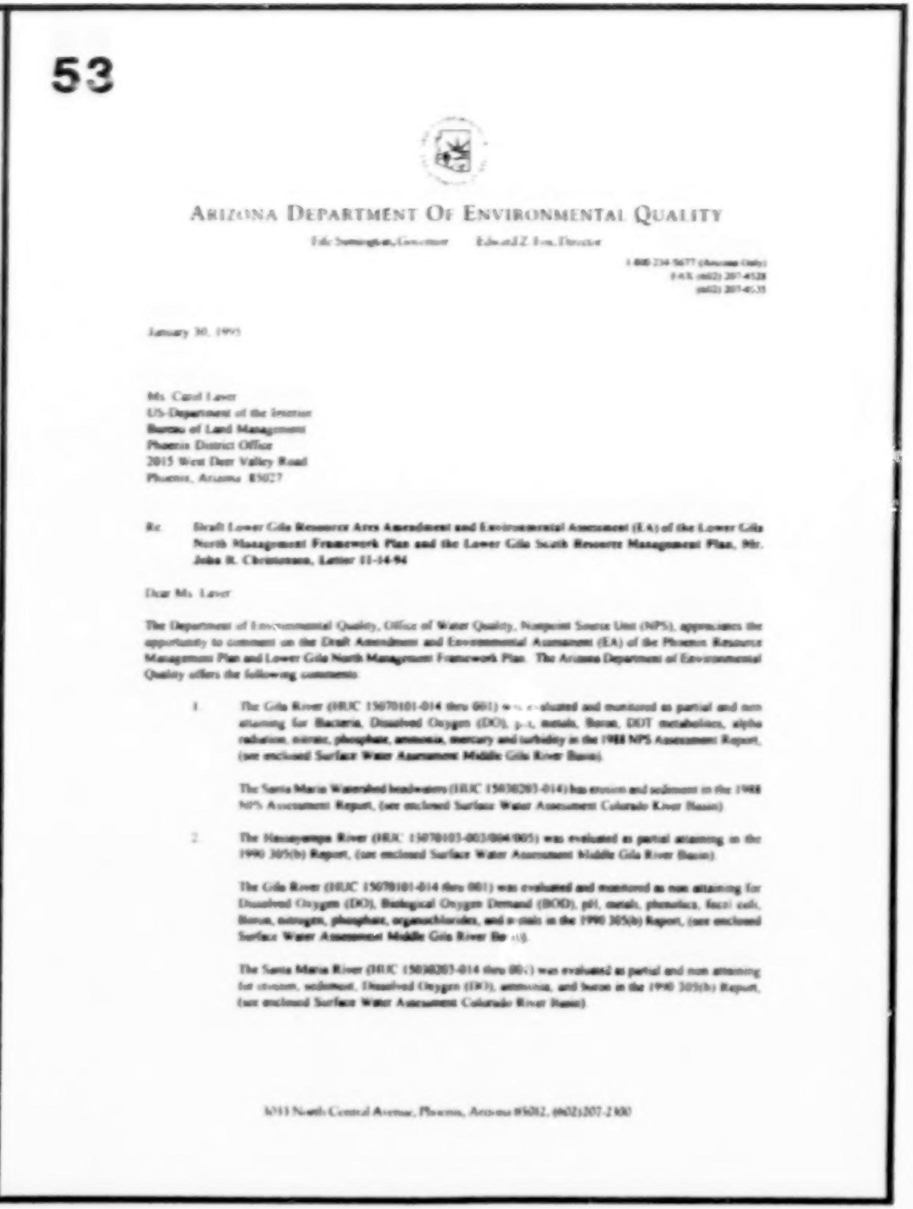

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ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
Fife Symington, Governor    Edward Z. Fox, Director
1-800-234-5677 (Arizona Only)
FAX (602) 207-4528
(602) 207-4535

January 30, 1995

Ms. Carol Laver
US-Department of the Interior
Bureau of Land Management
Phoenix District Office
2015 West Deer Valley Road
Phoenix, Arizona 85027

Re: **Draft Lower Gila Resource Area Amendment and Environmental Assessment (EA) of the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan, Mr. John R. Christensen, Letter 11-14-94**

Dear Ms. Laver:

The Department of Environmental Quality, Office of Water Quality, Nonpoint Source Unit (NPS), appreciates the opportunity to comment on the Draft Amendment and Environmental Assessment (EA) of the Phoenix Resource Management Plan and Lower Gila North Management Framework Plan. The Arizona Department of Environmental Quality offers the following comments:

1. The Gila River (HUC 15070101-014 thru 001) was evaluated and monitored as partial and non attaining for Bacteria, Dissolved Oxygen (DO), pH, metals, Boron, DDT metabolites, alpha radiation, nitrate, phosphate, ammonia, mercury and turbidity in the 1988 NPS Assessment Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Santa Maria Watershed headwaters (HUC 15030203-014) has erosion and sediment in the 1988 NPS Assessment Report, (see enclosed Surface Water Assessment Colorado River Basin).

2. The Hassayampa River (HUC 15070103-003/004/005) was evaluated as partial attaining in the 1990 305(b) Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Gila River (HUC 15070101-014 thru 001) was evaluated and monitored as non attaining for Dissolved Oxygen (DO), Biological Oxygen Demand (BOD), pH, metals, phenolics, fecal coli, Boron, nitrogen, phosphate, organochlorides, and metals in the 1990 305(b) Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Santa Maria River (HUC 15030203-014 thru 001) was evaluated as partial and non attaining for erosion, sediment, Dissolved Oxygen (DO), ammonia, and boron in the 1990 305(b) Report, (see enclosed Surface Water Assessment Colorado River Basin).

3. The Hassayampa River (HUC 15070103-004) was monitored as partial and non attaining for ammonia and turbidity in the 1991 205(j) Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Gila River (HUC 15070101-007) was monitored as partial attaining for Dissolved Oxygen (DO), mercury, pH, and Total Dissolved Solids (TDS) in the 1991 205(j) Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Santa Maria River (HUC 15030203-009) was evaluated as partial attaining for turbidity in the 1991 205(j) Report, (see enclosed Surface Water Assessment Colorado River Basin).

4. The Hassayampa River (HUC 15070103-003/004/005) was evaluated and monitored as partial and non attaining for ammonia, cadmium, copper, mercury, zinc, pH, Dissolved Oxygen and turbidity in the 1992 305(b) Report (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Gila River (HUC 15070101-014 thru 001) was evaluated and monitored as non attaining for Biological Oxygen Demand (BOD), pH, metals, Total Dissolved Solids (TDS), Soluble Solids (SSS), Settleable Solids (STS), fecal coliform, boron, organochlorides, and metals in the 1992 305(b) Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Santa Maria River (HUC 15030203-009,001) was evaluated and monitored as partial attaining for turbidity in the 1992 305(b) Report, (see enclosed Surface Water Assessment Colorado River Basin).

5. The Hassayampa River (HUC 15070103-007 thru 001) was evaluated and monitored as threatened, partial and non attaining for ammonia, antimony, arsenic, beryllium, boron, cadmium, copper, lead, manganese, mercury, selenium, zinc, organochlorides, pH, Dissolved Oxygen (DO), sediment, and turbidity in the 1994 305(b) Report (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Gila River (HUC 15070101-014 thru 001) was evaluated and monitored as non attaining for Total Dissolved Solids (TDS), fecal coliform, arsenic, mercury, copper, silver, boron, organochlorides, and turbidity in the 1994 305(b) Report, (see enclosed Surface Water Assessment Middle Gila River Basin).

   The Santa Maria River (HUC 15030203-012,001) was evaluated and monitored as threatened and partial attaining for Suspended Solids (SS), arsenic, cyanide, beryllium and turbidity in the 1994 305(b) Report, (see enclosed Surface Water Assessment Colorado River Basin).

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A surface water hydrologic connection exists between the Santa Maria River, Hassayampa River and the Gila River and the Draft Lower Gila Resource Area Amendment and Environmental Assessment (EA) of the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan via Santa Maria River, Hassayampa River, Gila River, and unnamed washes by the tributary rule.

The Arizona Department of Environmental Quality recommends that:

1. Where applicable the Management Agency and or Owner/Operator shall over-site any construction to ensure that discharges from the watershed or to all Waters of the State/Waters of the U.S. shall meet all applicable Water Quality Standards;

2. Best Management Practices should be implemented to protect watershed condition and riparian areas, to maintain adequate vegetative cover, and to minimize the discharge of sediment, nutrients, bacteria and manure to the Santa Maria River, Hassayampa River, the Gila River and unnamed washes or to all Waters of the State/Waters of the U.S.;

3. Best Management Practices should be implemented during and after all construction phases to protect watershed condition and riparian areas, to maintain adequate vegetative cover, and to minimize the discharge of sediment, petroleum, nutrients, bacteria and other pollutants to the Santa Maria River, Hassayampa River, the Gila River and unnamed washes or to all Waters of the State/Waters of the U.S.;

4. Best Management Practices should be implemented for construction activities for mechanical equipment to minimize ground disturbance;

5. Construction activities for mechanical equipment need to minimize the amount of particulate matter (dust) generated, including incidental emissions caused by strong winds, and tracking of dirt off the construction by mechanical equipment. Regarding rules that may apply contact Mr. Joe Gibbs at (602) 207-2378 with the Arizona Department of Environmental Quality, Air Quality Planning Section;

6. Be aware that portable sources of air pollution ie. rock, sand, gravel and asphaltic concrete plants are required to be permitted by ADEQ prior to commencing operations. Contractors and subcontractors working on this project may be required to comply with these regulations. Contact Mr. Prabhat Bhargava at (602) 207-2329 with the Arizona Department of Environmental Quality, Air Quality Permits Section;

7. A monitoring program should be implemented to evaluate the effectiveness of Best Management Practices in protecting watershed condition and Waters of the State;

**53**

Carol Laver
Page 4
January 30, 1995

8. Where applicable the Management Agency and or Owner/Operator shall demonstrate a knowledge **of-waste streams, permits and hazardous materials handling as well as indicate the destination of each hazardous waste being disposed off-site;**

9. All underground storage tanks must be registered with ADEQ. Contact **Mr. Bruce Ijirigho at (602) 207-4315** with the Arizona Department of Environmental Quality, Inspection and Compliance Unit, regarding assistance in registration;

10. All solid wastes generated by the activity shall be transported to an ADEQ approved facility. Waste stored on site for more than 90 days, or will be treated or disposed of on-site, may require facility approval. Contact **Ms. Mercedes Vidau at (602) 207-4117** with the Arizona Department of Environmental Quality, Solid Waste Plan Review Unit, regarding assistance in applying for this permit;

11. Sanitary waste facilities provided during construction phases shall be planned and developed in such a manner to ensure protection of both surface and groundwater resources;

12. **An Aquifer Protection Permit (APP) may be required.** Contact **Mr. Charles Graf at (602) 207-4661** with the Arizona Department of Environmental Quality, Aquifer Protection Program Section, regarding assistance in applying for this permit;

13. **A Clean Water Act, Section 402, NPDES Permit** is required for all ground disturbing activities which exceed 5 acres in impact. Contact **Mr. Robert Wilson at (602) 207-4574** with the Arizona Department of Environmental Quality regarding assistance in applying for this federal permit;

14. **A Clean Water Act, Section 404 Permit** may be required for the discharge of dredged or fill material into the navigable waters. Contact **Ms. Cindy Lester of the US Army Corp of Engineers at (602) 640-5385** regarding a 404 Permit application. In addition a Section 401 Certification may be required and can be obtained from ADEQ. Contact **Mr. Jim Matt at (602) 207-4502** with the Arizona Department of Environmental Quality, Engineering Review and Permits, for assistance in obtaining certification; and

15. A.A.C. R18-11-109, Surface Water Quality Standards Rules must be complied with as set forth in Section G (enclosed).

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**53**

Carol Laver
Page 5
January 30, 1995

Enclosed for your information and reference, please find a copy of A.A.C. R18-11-107/108/109, Surface Water Standards Rules. The Arizona Department of Environmental Quality would appreciate receiving information on the progress of this project. Thank you for your cooperation, should you have any questions, please contact me at (602) 207-4535.

Sincerely,

Karl F. Meyer

Karl F. Meyer
Nonpoint Source Unit

KM:km

Enclosures

cc: Pat Martella, ADEQ
Larry Stephenson, ADEQ
Mike Hill, ADEQ
Kris Randall, ADEQ
Peter Jagow, ADEQ
Dan Salzler, ADEQ

**Enclosures are available for review at the BLM Phoenix district office.**

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THE STATE OF ARIZONA

GAME & FISH DEPARTMENT

2221 West Greenway Road, Phoenix, Arizona 85023-4399 (602) 942-3000

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January 31, 1995

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PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA

Ms. Carol Laver
Phoenix District Office
Bureau of Land Management
2015 West Deer Valley Road
Phoenix, Arizona 85027

Re: Draft Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North Management Framework Plan (MFP) and the Lower Gila South Resource Management Plan (RMP)

Dear Ms. Laver:

The Arizona Game and Fish Department (Department) has reviewed the above-referenced draft Lower Gila Resource Area Amendment (Amendment), dated November 1994, and the following comments are provided.

GENERAL COMMENTS

The Amendment and accompanying Environmental Assessment (EA) will provide the basis for modifying the recreation, wildlife, minerals, free-roaming burros and lands sections of the existing Bureau of Land Management (Bureau) land use plans. The Department provided comments on general Amendment issues, specifically regarding potential changes to burro management, prior to review of this Amendment. Those comments were contained in a letter to the Phoenix District Manager dated April 8, 1994, a copy of which is enclosed. In addition, a more detailed explanation of Department positions on burro management and other issues pertinent to the Amendment are expressed in the Department's February 14, 1994 protest of the Bureau's Proposed RMP and Final Environmental Impact Statement (EIS) for the Kingman Resource Area.

54-1 The Department believes that the Amendment/EA, as written, does not adequately describe specific potential impacts associated with the alternatives presented. In addition, methods or opportunities to avoid or mitigate potential significant adverse impacts (e.g., impacts to the southwestern willow flycatcher) are not presented. This is a crucial issue if the document is to conform to the standards set forth by the Council on Environmental Quality

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54-1 Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA). A Finding of No Significant Impact must identify how any significant adverse impacts will be avoided or how those impacts will be reduced to a level of insignificance.

54-2 The Department is also concerned that the draft Amendment/EA does not conform to Bureau Policy Manuals. For example, specific planning determinations and associated RMP standards for free-roaming horses and burros are set forth in Bureau Manual Section 1622. The subject Amendment/EA does not include Factors of Analyses (Section 1622.42) or information required under Section 1622.43. According to Bureau Manual Section 4710.21, when the collection and analysis of data clearly show the need to adjust numbers of free-roaming horses or burros, the adjustment should be considered through the plan amendment process. In addition, the plan amendment process should include data or analysis as prescribed in Bureau Manual Section 1617.42 and in 43 CFR 1610.5-5. The subject Amendment/EA does not include the collection and analysis of data in order to support adjustments of the numbers of free-roaming horses or burros within the Lower Gila Resource Area.

ISSUE-SPECIFIC COMMENTS

**Lower Gila North MFP**

54-3 Specific lands within the Lower Gila North Management Framework Plan area are administered by the U.S. Army Corps of Engineers (Corps) and the Department. We are concerned that the Amendment does not describe the Alamo Lake Wildlife Area (Wildlife Area) and fails to recognize the Department's primary authority for management of wildlife and wildlife habitat on these lands. These issues have been raised in Department comment letters dated March 23, 1994, April 8, 1994, July 8, 1994, September 21, 1994, and December 19, 1994.

**Three Rivers Area of Critical Environmental Concern**

Consistent with the Department's protest of the Kingman RMP, the Department requests that the Bureau omit lands within the Wildlife Area from the Amendment/MFP and explain how the proposed management objectives and prescriptions for the Three Rivers Area of Critical Environmental Concern will be consistent with the current management direction for the Wildlife Area. All references to Bureau management on withdrawn lands associated with the Wildlife Area should be limited to discussion of grazing management, which is within the Bureau's authority on those lands.

**Wild Horse and Burro Management**

The Amendment addresses the following burro herd areas (HA): Alamo, Harquahala, Little Harquahala and Painted Rock.

**Alamo HA.** According to the Alamo Interim Herd Management Area Plan (Alamo Interim HMA Plan; 1977, updated in 1979), the Alamo HMA encompasses 211,000 acres with an Appropriate Management Level (AML) of approximately 200 animals. Significant riparian resources (e.g., Santa Maria River) are not within the Alamo HMA boundaries.

This Amendment will provide the basis for modifying HMA boundaries and existing free-roaming horse and burro management within the Alamo HA/HMA. It is proposed that burros in the Alamo HMA be managed as a self-sustaining population which contains the optimum number of free-roaming burros in a thriving natural ecological balance.

The Department has many concerns relating to Alamo Lake area burro issues addressed in the Amendment and proposed modifications to burro management within the Alamo HMA, as detailed below.

54-4

- Amendment Map 3 (page 10), describing burro HAs, is inconsistent with the 1974 Wild Horse and Burro Distribution Map provided for us on May 6, 1993 by the Phoenix District Office of the Bureau. Specifically, composite HA's shown in Amendment Map 3 are substantially larger than the composite HA's shown in the 1974 Distribution Map.

- Amendment description of the Alamo HMA boundaries (page 32) is inconsistent with the Alamo HMA boundaries described in the Alamo Interim HMA Plan. Rather, the Alamo HMA boundary, as described in the Alamo Interim HMA Plan, is more consistent with the 1974 Distribution Map (i.e., HA map), since both maps show the eastern extension of the Alamo HA and HMA in close proximity to the confluence of the Big Sandy and Santa Maria Rivers.

- The Department is aware of only one decision document which accurately describes the Alamo HMA boundaries: the Alamo Interim HMA Plan. The Department is not aware of an additional Bureau decision document which specifically addresses an expansion of the Alamo HMA boundaries. Modifications to the HMA boundary, as described in the Alamo Interim HMA Plan, would have been necessary to coincide with the boundaries described in the Amendment (page 32).

54-5

- The Amendment description of the Alamo HMA boundaries (page 32) is inconsistent with site-specific free-roaming burro issues described in the Bureau's February 11, 1994 Plan Amendment Information. The Amendment describes the eastern boundary of the Alamo HMA at Highway 93. However, the February 11, 1994 Amendment information suggests that the eastern boundary of the Alamo HMA is west of the Three Rivers area (i.e., the confluence of the Big Sandy and Santa Maria Rivers). The following statement appears on page 2 of the February 11, 1994 Amendment information: "Alamo herd management boundary extension from the Three rivers to the east boundary of the Santa Maria Community Allotment". This statement implies that the extension of the Alamo HMA boundary from the Three Rivers area east is one of many proposed actions in the Amendment.

54-4

- According to the Amendment (page 32), the distribution of free-roaming burros in the Lower Gila resource area has expanded beyond the herd area boundaries defined by the relevant planning documents. The perpetuation of burro populations outside of those areas delineated as burro use areas at the time the Wild and Free-Roaming Horse and Burro Act of 1971 (Act) was passed appears to be inconsistent with the Act.

54-2

- Consistent with the Act, the Alamo Interim HMA Plan established an AML (i.e., thriving natural ecological balance) of 200 burros for the Alamo HMA. However, according to the amendment (page 32), the current populations is estimated to be 500 to 600 animals. Therefore, the Bureau has failed to maintain the AML within the Alamo HMA in accordance with the Act and multiple Bureau Manual Sections.

- The Alamo Interim HMA Plan clearly supports the AML of 200 animals for this HMA. However, the Amendment does not include the collection and analysis of data to show the need for adjustments to the previously determined AML for the Alamo HMA.

- It is proposed that burros in the Alamo HMA will be managed as a free roaming, self-sustaining population in thriving ecological balance. However, the Bureau has not provided results of analyses of factors as described in Bureau Manual Section 1622, which is necessary to support the determination of the proposed management prescription for burro HMAs. In addition, the proposed AML and thriving natural ecological balance for the Alamo HMA, as defined in Bureau Instructional Memorandum NO. 90-491, have not been defined in the Amendment.

54-6 Thriving natural ecological balance should be defined and supported, pursuant to Bureau policies. Potential environmental consequences associated with increasing the AML of the Alamo HMA should also be evaluated in the Amendment.

54-3

- As detailed in Issue #2 of the previously mentioned Kingman RMP protest, we contend that the definition of public land in the Act does not apply to the Alamo Wildlife Area. Therefore, the Department believes that no portion of the Wildlife area should be within the boundaries of the Alamo HMA.

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54-7 The Department believes that the combination of livestock and burro grazing and trampling in the Santa Maria River may result in adverse modifications of southwestern willow flycatcher habitat. This concern is consistent with data and issues identified in the Bureau's Lower Gila North Grazing EIS, supporting EIS-rangeland Program Summaries, and the Lower Gila North MFP. Considering the high riparian habitat values associated with the Santa Maria River, significant resource conflicts could be avoided by not including this riparian area within the Alamo HMA boundaries.

54-8 The Department is concerned about burro impacts to riparian habitats within the Alamo HA (e.g., Big Sandy and Santa Maria Rivers). The attached Department report summarizing findings from a study of burro impacts indicates that burros are adversely impacting Santa Maria River cottonwood-willow communities. It is Department policy to recognize riparian habitats as areas of critical environmental importance to wildlife and fisheries. Similarly, and pertinent to the subject Amendment, Bureau policy states: "... Ensure that new RMPs and activity plans, and existing plans when revised, recognize the importance of riparian values, and initiate management to maintain, restore, or improve them" (Bureau Riparian Area Management Policy, January 22, 1987). The creation of an HMA that would encompass significant riparian resources appears to be inconsistent with Bureau policies regarding riparian habitat.

Where the Department's Wildlife Area and the Alamo HMA overlap, we disagree with actions to limit or modify construction of new structures (e.g., fencing) which would restrict burro movement. Within the Wildlife Area, the Department is in the process of identifying critical riparian resources that warrant immediate protection. Riparian habitats on the Wildlife Area that need protection will be fenced to exclude burros.

54-3 Based on our evaluation of the lower seven miles of the Santa Maria River, which would represent a critical area (i.e., availability of surface water) for any burro herd occurring in the area, we believe that only 0.75 miles of this stretch includes public lands administered by the Bureau. Within this 7 mile stretch of the Santa Maria River, 4 miles are within the Department's Wildlife area and the remainder is private property. There is doubt that the 0.75 mile portion of the Santa Maria River administered by the Bureau will maintain surface flows during the hot summer months. Therefore, burros would have to obtain water on private lands or Alamo Wildlife Area lands.

The Department supports the No Action alternative for the Alamo HMA. We believe that the Alamo Interim HMA Plan is biologically sound, and we support the AML of 200 burros for this HMA. In addition, the existing HMA does not include significant riparian

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resources, such as the lower Santa Maria and Big Sandy Rivers. Significant burro conflicts with private land management (e.g., livestock grazing) along the lower Santa Maria River could be avoided by not including this area within a HMA.

**Harquahala, Little Harquahala, and Painted Rock HAs.** Existing Bureau planning documents prescribe zero population management or total removal of free-roaming burros from the Harquahala, Painted Rock and Little Harquahala HAs. Bureau planning documents also describe actions to protect bighorn sheep lambing areas and a two-mile buffer in the Harquahala and Little Harquahala Mountains from disturbances created by burros. In addition, all burros were to be removed at waters used by big game in the Harquahala Mountains. Resource conflicts between burros and Threatened and Endangered plants and animals were also identified in the Harquahala Mountains.

This Amendment will provide the basis for modifying existing free-roaming horse and burro management within the Harquahala and Painted Rock HAs as described above. It is proposed that burros in the Harquahala and Painted Rock HAs will be managed as free roaming, self-sustaining populations in thriving ecological balance. 54-9 We understand that the Little Harquahala HA is entirely within the Yuma Resource Area and, therefore, will not be affected by this Amendment.

The Department has several concerns relating to the proposed modifications to burro management in the Harquahala and Painted Rock HA's, as detailed below.

- 54-10 Within and adjacent to the Painted Rock HA, the Lower Gila South RMP describes conflicts between burros and private agricultural land and the recreation area below Painted Rock Dam. The Amendment does not explain how the proposed action will address these conflicts. We note that the HA still encompasses a substantial amount of private land. In addition, the Amendment does not evaluate potential impacts to wildlife and wildlife habitat as a result of the Proposed Action.
- 54-11 The Lower Gila North MFP describes significant resource conflicts between burros and bighorn sheep in the Harquahala Mountains. In addition, resource conflicts between burros and Threatened and Endangered plants and animals were identified in the Harquahala Mountains. The Amendment does not explain how these previously identified resource conflicts have been resolved or are no longer significant.

- 54-2 The proposed action for burro management within the Harquahala and Painted Rock HA's does not comply with Bureau Manual Section 1622 or Section 4710. Specifically, the Amendment does not include discussion of Factors of Analyses (Section 1622.42) or the collection and analysis of data (4710.23) used in arriving at Proposed Action determinations. 54-6 Thriving natural ecological balance should be defined, supported, and calculated in accordance with the Act and Bureau policies.

- 54-11 The Amendment does not provide an adequate or accurate overview of the anticipated impacts of the Proposed Action for the Harquahala and Painted Rock HAs. For example, significant resource conflicts between burros and Threatened and Endangered species and bighorn sheep were identified in the Harquahala Mountains. However, the Bureau is proposing to change management prescriptions in the Harquahala Mountains from zero population management to maintenance of a free-roaming, self-sustaining population. Results of the analysis of environmental consequences to support this Proposed Action should be included in the Amendment to explain why previously determined impacts are no longer of significance.

- 54-12 Burros have expanded their range beyond the Harquahala HA boundary and now range south of the Big Horn and Belmont mountains to Interstate 10. Management of burros outside of a HA appears to be inconsistent with Federal regulations (43 CFR 4700.0-5(d) and 4710.4).

- The Lower Gila North MFP recommends "...reducing competition for cover, water, and space between big game, livestock, and burros by reducing livestock aggregations and removing all burros at waters in the Big Horn, Granite Wash, and Harquahala Mountains." The Department believes that the only feasible means of accomplishing this, and addressing other resource conflicts, is through the complete removal of burros from the Granite Wash, Little Harquahala, Harquahala, Big Horn and Belmont Mountains.

- 54-13 A HMA should be considered for designation as a free-roaming horse or burro range only if there is a significant public value present (Bureau Manual Section 4710.33). The subject Amendment does not define the significant public value associated with the creation of HMA's in the Harquahala and Painted Rock HA's.

The Department supports the No Action alternative for the Harquahala and Painted Rock HA's (i.e., total removal of burros). We agree that there would be no conflicts with other resources once all burros are removed. Previously identified conflicts between burros and other resources within these HA's should be reevaluated and documented prior to proposed modifications of existing management prescriptions.

In addition to the aforementioned issues and concerns regarding the Alamo, Harquahala, and Painted Rock HAs, the Department believes that the following specific issues should be resolved and addressed in the Amendment:

1. The Department requests that the Bureau comply with the Act and Bureau Manual Sections 4700 and 1600 and initiate efforts to reduce burro numbers in the Alamo HMA in order to maintain the AML of 200. As stated in Section 1332.(b)(2) of the Act, "...that an overpopulation exists on a given area of the public lands and that action is necessary to remove excess animals, he shall immediately remove excess animals from the range so as to achieve appropriate management levels". To maintain riparian system function and health, as well as management flexibility for livestock operators, removal of all burros from the lower Santa Maria River area should be initiated. We believe this issue should be addressed in the subject Amendment.

54-2 2. With regard to the Alamo, Harquahala and Painted Rock HA's, the Department requests that the subject Amendment include detailed discussion of the following factors, which we believe is consistent with Bureau Manual Sections 4700 and 1622, as well as Instructional Memorandum No. 90-491.

- Definition of thriving natural ecological balance and AML for specific HA's (proposed HMAs)
- Areas of use
- Manageability of the HA
- Management intensity
- Management objectives
- Adjustment criteria
- Resource constraints

54-14 3. Detailed and accurate maps showing official boundaries for the Alamo HA and HMA, and the Harquahala and Painted Rock HA's should be included in the Amendment.

4. The Amendment should reference the document used by the Bureau to justify expansion of the Alamo HMA boundaries from below the confluence of the Big Sandy and Santa Maria Rivers to Highway 93. Again, according to the 1974 Burro Distribution Map, the eastern boundary of the Alamo HA is in close proximity to the confluence. Therefore, expansion of the Alamo HMA's eastern boundary outside of the Alamo HA to Highway 93 appears to violate Federal regulations.

5. According to Bureau Policy Manual 4710.23, "When the collection and analysis of data clearly show the need for adjustments in the numbers of free-roaming horses and burros or the need for other adjustments (and a plan revision is not scheduled), the adjustments shall be considered through the plan amendment process." The Department requests that the Bureau include the collection and analysis of data used to support the proposed adjustments in the numbers of free-roaming horses and burros in the Alamo, Harquahala and Painted Rock HA's.

**54**

Ms. Carol Laver
January 31, 1995
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6. The Lower Gila North HMP calls for maintaining free burro access to Alamo Lake. Provided the issues and concerns raised by the Department in this letter can be resolved, the Department would be willing to work with the Bureau to assure burro access to Alamo Lake. We do not believe this action would be inconsistent with the purposes of the Wildlife Area. This potential cooperative effort would be predicated upon the immediate removal of all burros from riparian habitats (e.g., the Big Sandy and Santa Maria Rivers) within the Wildlife Area. Based on the June 7, 1989 Interior Board of Land Appeals decision regarding removal of excess free-roaming horses in Nevada, the Bureau could proscribe zero population management or total removal of burros within critical riparian resources without challenge.

**Recreation Management**

Modifications to recreation management are difficult to evaluate because complete descriptions of the proposed modifications and the specific areas to be affected are not provided in the Amendment. However, some issues the Department would like to discuss during the interdisciplinary planning process include:

- Division of the entire District into recreation management areas, some of which would receive a special designation, as proposed.
- Prioritization of each recreation management area based on OHV damage.
- Creation and publication of maps of the existing roads, trails and washes within each recreation management area (prioritization), as well as restricted areas.
- Closure and revegetation of all remaining undesignated roads and trails.
- Consolidation of all OHV courses into T1S, R3W and T2S, R3W. This area is already heavily impacted by OHV use, has low wildlife value because of isolating barriers, and contains the topography and existing road system to accommodate any type of OHV event.

**Land Tenure Adjustments**

The Department would like to have the opportunity to coordinate with the Bureau to identify key resource components, including critical desert tortoise habitat, wildlife corridors, and riparian habitat.

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**54**

Ms. Carol Laver
January 31, 1995
10

PAGE-SPECIFIC COMMENTS

Page 3, Planning Issues

54-15 Within this section of the Amendment, the Department recommends inclusion of pertinent issues described in the Bureau's Rangewide Plan for Managing Habitat of Desert Bighorn Sheep on Public Lands and Manual 1745.

Page 4, Issue 3

Discussion of the Department's Strategic Plan for Bighorn Sheep and goals listed by habitat category in the above-referenced Bureau Rangewide Plan could improve the adequacy of this section.

Page 18, right column, third issue

54-16 The management of wildlife resources on public lands is legally mandated to the Department. The only exception is that species protected under the Endangered Species Act are jointly managed by the Department and the U.S. Fish and Wildlife Service. Therefore, the Department requests that the opening sentence be modified to read "Cooperate as necessary with Arizona Game and Fish Department and the U.S. Fish and Wildlife Service to manage wildlife on public lands...". The Rangewide Plan and Arizona Strategy Plan for desert tortoise habitat management do not preempt the State's authority to manage wildlife resources.

Management authority for desert bighorn sheep and the Sonoran population of desert tortoise lies entirely with the Department. Because of this authority, the Department is the primary decision making body regarding the resolution of any conflicts between these two species. The Department believes that wording in the subject issue statement is overly restrictive and does not reflect the Department's authority to biologically determine what level of conflict is acceptable in the management of Sonoran desert tortoise. The Department requests that both italicized paragraphs of this issue statement be modified to state that proposed actions will be evaluated cooperatively with the Department to determine the level of potential conflicts with desert tortoise and desert tortoise habitat.

Page 19, Desert Bighorn Sheep Reestablishment and Augmentation

54-15 The Department notes that it may be beneficial to note that additional guidance will be available upon finalization of the Bureau's draft Mountain Sheep Ecosystem Management Strategy on Public Lands.

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Page 19, right column, first complete sentence

54-17 The meaning of this sentence could be clarified by stating that transplanting may be done in areas "where conflicts either do not occur or can be resolved."

Page 19, Wild Horse and Burro Management, third paragraph

54-18 This paragraph includes the statement that "...habitat development projects within wild burro herd areas or herd management areas shall be modified/constructed so as to not adversely affect wild burro populations." The Department recommends that this wording be modified to more appropriately reflect that relatively insignificant adverse effects may be acceptable, if evaluated on a case-by-case basis.

Page 20, Off-Highway Vehicle Designation and Management

The Department supports the proposed management of Off-Highway Vehicle (OHV) use in the Lower Gila Resource Area. The change in designated use from "open" to "limited" will serve to protect additional wildlife habitat as the creation of new "renegade routes" by visitors will be prohibited. The Department does recommend that the term "traditional or historically used vehicle route" is further clarified within the document. 54-19 Recent OHV trespass off of a designated route could be interpreted as a "historic route" after several vehicles follow recently made vehicle tracks across country. The clarification of this terminology will assist the Department in the enforcement of OHV regulations on Bureau lands.

Page 26, Extended Camping Areas

54-20 The Department concurs with the Amendment proposal that no long-term visitor areas or short-term camping areas are located within Category I or II tortoise habitat. However, the document only states that mitigation will be required if extended camping areas are located in category II or III desert tortoise habitat. The document does not indicate the steps for the protection of Category I tortoise habitat in the extended camping areas. The Department recommends that extended camping areas be located outside of Category I and II tortoise habitat, and that extended camping areas located within Category III habitat be mitigated. This recommendation corresponds with the BLM desert tortoise habitat category goals as outlined in the Goals and Criteria for Three Categories of Desert Tortoise Habitat on page 75 of the Amendment.

Page 29, Affected Environment, Lower Gila North

54-21 The Department notes that portions of the Santa Maria River are perennial. An additional attraction to the Lower Gila North area is Alamo Lake and the adjacent Wildlife Area.

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Page 29, right column, Goldwater Range

Although the Goldwater Range has been closed to livestock grazing since 1961, the range has been grazed heavily by livestock until the mid 1970s.

Page 31, right column, second paragraph

54-22 The Department notes that Yuma clapper rails are as abundant along the Colorado River in the U.S. as in Mexico

Page 31, right column, fifth paragraph

The Department notes that the Endangered peregrine falcon have been documented as nesting in Peoples Canyon.

Page 32, Alamo Herd Management Area

According to the Alamo Interim HMA Plan, the HMA encompasses approximately 211,397 acres.

Page 39, Desert Bighorn Sheep Augmentation and Reestablishment

According to Bureau Manual 1745, Section 1.13, NEPA requirements can be met by an EA. In Manual 1745, Section 16, the supplementation or augmentation of existing populations can be redelegated to the District or Area Manager.

Page 41, Threatened or Endangered Species

54-23 The following statement appears: "No adverse impacts to listed species are anticipated from implementation of the proposed action". The basis or justification to support this position is not provided. In addition, a similar statement is made regarding environmental consequences associated with the No Action alternative (page 39). The Department believes that in order to recognize any appreciable differences in potential impacts to wildlife resources, the Amendment must include detailed discussion of the environmental consequences of each alternative.

Page 41, Wildlife

The Department is concerned that this section does not fulfill the intent of NEPA. It is our understanding that this section should address the environmental consequences to wildlife that may be attributable to the proposed free-roaming horse and burro management actions. The management of wildlife resources or mitigation for impacts to burros does not coincide with this description. As stated above regarding Threatened or Endangered species, the Department does not believe that this section of the Amendment adequately evaluates potential impacts to wildlife resources associated with the Proposed Action.

**54**

54-3 Where the Department's Wildlife Area and the Bureau's Alamo HMA overlap, free-roaming burros are not comparable to other resource values. The lands withdrawn in conjunction with the Alamo Dam Project were provided to the Department specifically for wildlife management purposes. The Department requests that the subject section be rewritten to address the concerns stated above.

Page 41, Wild Burros

Habitat monitoring has shown that ecological balance may be threatened by burros in the Alamo Lake area, specifically along the lower Santa Maria River. As noted in our comment letter of December 19, 1994, to Mr. John Christensen, Area Manager, the Department believes that the use of this riparian area by burros in excess of the 200-burro AML for the Alamo HMA has contributed to adverse impacts to the function and health of the Santa Maria River riparian system.

Pages 64 and 66, Desert Bighorn Sheep Augmentation

54-24 It is implied that a change is forthcoming under the Proposed Action, when in fact there is no change. Under Bureau Manual 1745, augmentations will be considered on a case-by-case basis. In fact, this has been the case with the augmentations in the Gila Bend and Sauceda Mountains. The only change in management direction may result from the identification of "reestablishment" projects. Reestablishment may be required in the Bighorn and Belmont Mountains, although these areas may be classified under "augmentation." In either case, each project will be reviewed on a case-by-case basis as projects have been in the past.

Thank you for the opportunity to review the subject document. The Department would appreciate being involved in a review of the final document when it becomes available. If any of the previous Department comment letters referenced above are not readily available to you, copies will be provided upon request. If you have any questions, please contact me at 789-3602.

Sincerely,

James E. Burton

James E. Burton, Chief
Habitat Branch

JEB:JFK:jk

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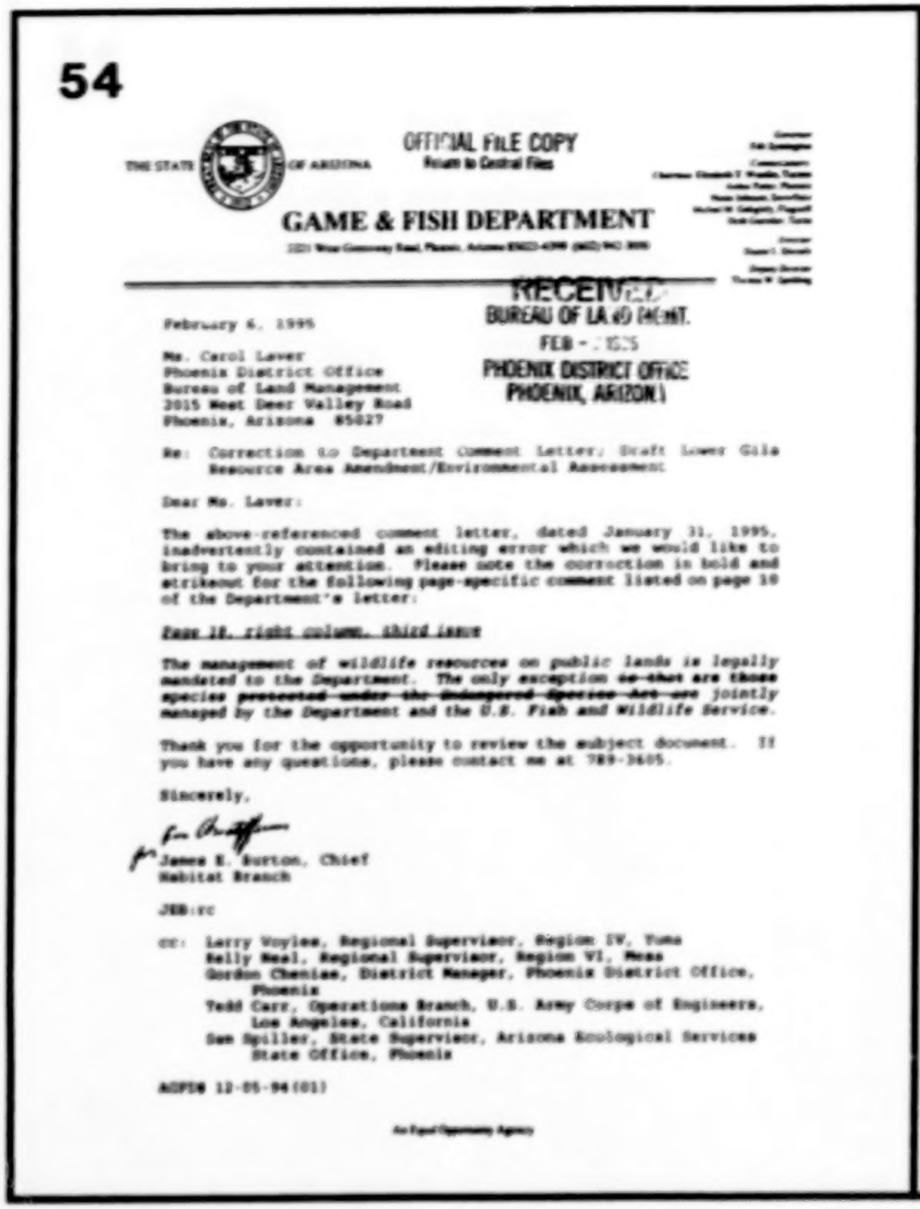
**54**

cc: Larry Voyles, Regional Supervisor, Region IV, Yuma
Kelly Neal, Regional Supervisor, Region VI, Mesa
Gordon Cheniae, District Manager, Phoenix District Office, Phoenix
Tedd Carr, Operations Branch, U.S. Army Corps of Engineers, Los Angeles, California
Sam Spiller, State Supervisor, Arizona Ecological Services State Office, Phoenix

Enclosures

AGFD# 12-05-94(01)

**Enclosures are available for review at the BLM Phoenix district office.**



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# GAME & FISH DEPARTMENT

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PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA

February 6, 1995

Ms. Carol Laver
Phoenix District Office
Bureau of Land Management
2015 West Deer Valley Road
Phoenix, Arizona 85027

Re: Correction to Department Comment Letter; Draft Lower Gila Resource Area Amendment/Environmental Assessment

Dear Ms. Laver:

The above-referenced comment letter, dated January 31, 1995, inadvertently contained an editing error which we would like to bring to your attention. Please note the correction in bold and strikeout for the following page-specific comment listed on page 10 of the Department's letter:

*Page 10, right column, third issue*

*The management of wildlife resources on public lands is legally mandated to the Department. The only* ***exception*** ~~*is that*~~ ***are those*** *species* ~~*protected under the Endangered Species Act are*~~ *jointly managed by the Department and the U.S. Fish and Wildlife Service.*

Thank you for the opportunity to review the subject document. If you have any questions, please contact me at 789-3605.

Sincerely,

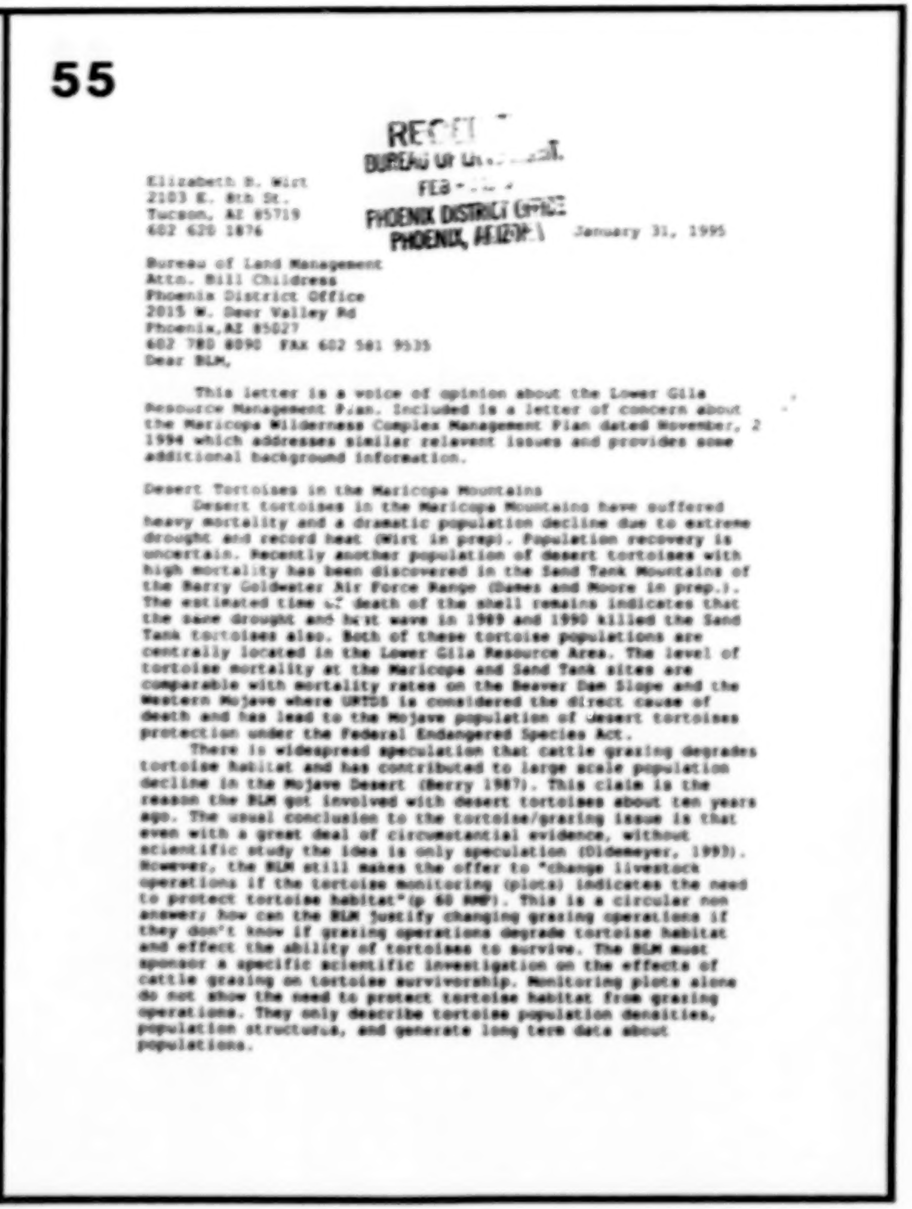
for James E. Burton, Chief
Habitat Branch

JEB:rc

cc: Larry Voyles, Regional Supervisor, Region IV, Yuma
Kelly Neal, Regional Supervisor, Region VI, Mesa
Gordon Cheniae, District Manager, Phoenix District Office, Phoenix
Tedd Carr, Operations Branch, U.S. Army Corps of Engineers, Los Angeles, California
Sam Spiller, State Supervisor, Arizona Ecological Services State Office, Phoenix

AGFD# 12-05-94(01)

An Equal Opportunity Agency



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RECEIVED
BUREAU OF LAND MGMT.
FEB -
PHOENIX DISTRICT OFFICE
PHOENIX, ARIZONA

Elizabeth B. Wirt
2103 E. 8th St.
Tucson, AZ 85719
602 620 1876

January 31, 1995

Bureau of Land Management
Attn. Bill Childress
Phoenix District Office
2015 W. Deer Valley Rd
Phoenix,AZ 85027
602 780 8090 FAX 602 581 9535
Dear BLM,

This letter is a voice of opinion about the Lower Gila Resource Management Plan. Included is a letter of concern about the Maricopa Wilderness Complex Management Plan dated November, 2 1994 which addresses similar relevent issues and provides some additional background information.

Desert Tortoises in the Maricopa Mountains

Desert tortoises in the Maricopa Mountains have suffered heavy mortality and a dramatic population decline due to extreme drought and record heat (Wirt in prep). Population recovery is uncertain. Recently another population of desert tortoises with high mortality has been discovered in the Sand Tank Mountains of the Barry Goldwater Air Force Range (Dames and Moore in prep.). The estimated time of death of the shell remains indicates that the same drought and heat wave in 1989 and 1990 killed the Sand Tank tortoises also. Both of these tortoise populations are centrally located in the Lower Gila Resource Area. The level of tortoise mortality at the Maricopa and Sand Tank sites are comparable with mortality rates on the Beaver Dam Slope and the Western Mojave where URTDS is considered the direct cause of death and has lead to the Mojave population of desert tortoises protection under the Federal Endangered Species Act.

There is widespread speculation that cattle grazing degrades tortoise habitat and has contributed to large scale population decline in the Mojave Desert (Berry 1987). This claim is the reason the BLM got involved with desert tortoises about ten years ago. The usual conclusion to the tortoise/grazing issue is that even with a great deal of circumstantial evidence, without scientific study the idea is only speculation (Oldemeyer, 1993). However, the BLM still makes the offer to "change livestock operations if the tortoise monitoring (plots) indicates the need to protect tortoise habitat"(p 60 RMP). This is a circular non answer; how can the BLM justify changing grazing operations if they don't know if grazing operations degrade tortoise habitat and effect the ability of tortoises to survive. The BLM must sponsor a specific scientific investigation on the effects of cattle grazing on tortoise survivorship. Monitoring plots alone do not show the need to protect tortoise habitat from grazing operations. They only describe tortoise population densities, population structure, and generate long term data about populations.

The desert tortoises in the Maricopas do need habitat protection, now more than ever so the population can eventually recover. To my knowledge, even though the Maricopa plot has undergone the most dramatic and catastrophic drop of desert tortoise populations in Arizona, new cattle stock tanks have been constructed on the Connely grazing allotment which is on the south border of the Maricopa tortoise monitoring plot. I could speculate about how grazing has degraded tortoise habitat in the Maricopas, and how that will inhibit the recovery of the tortoise population, but it will only be speculation. Instead, I strongly urge the BLM to cosponsor with AGFD a long term comparison study of desert tortoise population recovery in the Maricopas and the Sand Tanks. One site has the typical effects of Sonoran desert grazing operations and the other without, otherwise the sites are very similar. This sort of study is a better use of taxpayers money than additional monitor plots which do not address the grazing issue.

Recreation and Desert Tortoises

55-1 In addition to new grazing pressures, the BLM is suggesting trails and recreational activities in the Maricopa Mountain Wilderness areas (see letter dated Nov. 2, 1994) which will add more human related pressures to the Maricopa desert tortoises. In the LGRA Resource Management Plan, the concept of Special Recreation Areas sounds good in terms of protecting the natural resources but I am concerned. I feel that organized recreational activities will actually draw more people to those areas than if no activities are offered, resulting in sacrifice zones. I strongly believe the Maricopa Mountain range should NOT become a sacrifice zone. For the same reason, I believe all recreational activity plans should be kept out of wilderness areas.

55-2 The effects of off road vehicles and desert tortoises is well documented; please limit and restrict off road vehicles as much as possible on BLM lands.

Burros and Desert Tortoises

Desert tortoises rely heavily on shade to extend their morning foraging bouts before the heat of midday forces them underground (Zimmerman, 1994). Desert tortoises also rely on palo verde leaf litter for food during drought periods (Wirt in prep.) Burros cause severe damage to palo verdes and other desert trees which provide critical shade and food for smaller animals such as desert tortoises. I have witnessed a burro "chew down" a medium sized little leaf paloverde in less than ten minutes. All that was left was a stump and a brush pile of branches scattered around the base of the stump. A medium sized palo verde tree may be 50-150 years old (Webb, in press). Burros are not a part of the natural ecological balance and degrade tortoise habitat even more dramatically than cattle. I strongly urge the BLM to remove all burros from desert tortoise habitat.

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Land Tenure

55-3 I am in support of the BLM blocking up areas of land to better manage solid chunks of land instead of scattered pieces. However, I would rather the BLM extend its boundaries to include more land for acquisition in the south end the Rainbow Valley near the Sierra Estrellas( T.2S R.1W parts or all of sections 25,26,27,34,35; T.3S R.1W secs 1, 3, 4, 6.) especially land near Sierra Espanto (T.4S R.1W secs 12,24,25; T.4S R.1E secs 4,5,8,10, 17,18,19,30) and the north end of Mobile Valley.

Pristine riparian areas in the Alamo Lake Complex are worthy of Critical Environmental Concern in the North Gila Resource Area, but the lack of mention to conserve desert riparian systems in the South Gila Resource Area is overwhelming. The bulk of the Gila Resource Area is composed of land south of Interstate 10 which is biotically very different from the Alamo Lake area. I think the LGRA should seriously consider acquiring land along all parts of the following riparian systems; Hassayampa River, the Gila River especially around the Gillespie Dam, Centennial Wash, Vekol Wash, Waterman Wash, Santa Rosa Wash and Santa Cruz Wash. These are vital for all desert wildlife as dispersal corridors and habitat in any condition of degradation. The desert riparian systems effect and support all aspects of the BLM's multiple use objectives; grazing, wildlife, recreation, and long term conservation. Managing linear networks of riparian systems for the long term good of the public lands would be a prudent use of taxpayers dollars.

If I can be of service to the BLM with respect to clarification of the biological considerations of this letter, I would be happy to discuss them at greater length.

Sincerely,
Elizabeth B. Wirt

### Literature Cited

Berry, K.H. 1978. Livestock Grazing and the Desert Tortoise. Trans. 43 North Amer. Wilfe and Nat Resc. Conf. pp. 505-519.

Oldemeyer, J. L. 1993. Livestock grazing and the desert tortoise populations in the Mojave desert. In: Biology of North American Tortoises. Fish and Wildlife Research 13, National Biological Survey. pps 95-104.

Webb, R. et al. In press. A Century of Environmental Change in Grand Canyon. Univ. of Arizona Press.

Zimmerman, L. C. et al. 1993. Thermal ecology of desert tortoises in the eastern Mojave Desert: Season patterns of operative and body temperatures, and microhabitat utilization. Herpetological Monograph No. 7 pps 45-59

**Enclosure is available for review at the BLM Phoenix district office.**

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January 31, 1995

Bill Childress
Bureau of Land Management
Phoenix District Office
2015 W Deer Valley Rd
Phoenix, AZ 85027

Dear Mr. Childress,

Thank you for the opportunity to comment on the Amendment and Environmental Assessment to the Lower Gila North and South Management Plans. I share the Bureau of Land Management's concerns over the growing recreational pressures on the BLM lands covered in this document. I also share your concern for management changes that can allow the BLM to manage increased recreational demands while protecting the lower Gila Resource Area. I will also comment on the other planning issues being addressed in this document.

**RECREATION:**

While I agree that growing recreational demands require changing management strategies, we do not agree with all of the BLM's proposals for "expanded recreational management capabilities". I found inadequate data in this document to support the BLM's Alternative 2 (Proposed Action) on Recreation. I also found inconsistencies in some of the main objectives for recreational management.

56-1 The BLM states that Long-Term Visitor Areas (LTVA's) will be "located within
30 miles of local communities" (page 25- resource factors), which could entail
large developments not in remote primitive areas currently with low
visitation. This is contradictory to the broad recreation statement on page
20 that says these types of areas "will be perpetuated when considering
recreational development. It appears the BLM is proposing a function better
56-2 served by the private sector with its LTVA concept. This concept appears to
put the BLM in competition with a private sector that would tend to locate
large campgrounds near or in towns where there are more services. Long term
visitors would still be in the area and could easily explore the more remote
desert areas on day trips that would be easier to manage.

56-3 Under LTVA's (page 35) the draft amendment speaks of developments to support
100 to 500 recreational vehicles but is ambiguous as to whether this is the
total for the whole Lower Gila Resource Area or the number range per
development. Also there is no plan for where these developments might go. As
GR for public input into these major projects, there doesn't appear to be room
for any since this amendment would leave it up to the BLM and an
interdisciplinary project planning team to establish regulations, conditions
and modifications to previously listed guidelines. The public should be
allowed to help develop site specific plans and guidelines in this type of
process.

This draft amendment/environmental assessment does not provide any scientific studies or address the direct and cumulative impacts to resources around these proposed LTVA areas or Extended Camping Areas.

Extended Camping Areas and Special uses and Scarce Opportunities in this document all suffer from the same problems. There is very little specific information regarding impacts from these developments for the public to make productive and informed comments on and then all of these proposals would be implemented without any public involvement. This is also true of all the other recreational components.

56-4 It is unclear why the BLM is changing the OHV designation in the Vekol Grassland Area of Critical Concern and the Coffeepot Botanical Area of Critical Concern from "closed" to "limited to designated routes only". What scientific evidence supports this? What of the ongoing vehicle damage that brought on the current management designation? Has the damage stopped?

GR It appears that other critical components of OHV management have also been "tiered off" from this EA to be dealt with at a later date by a management team" without public involvement. This includes commercial and competitive race courses.

**LAND TENURE/DISPOSAL**

56-5 The public should be notified, in advance, of all land disposal and provided with complete information, including the appraisals, and maps for public comment. The NEPA process should be invoked for any land disposal since this would be a significant federal action affecting the human environment. Alternative 2 does not specify, in acres, the amount of land being considered for acquisition. This information should be provided to the public for comparison to the existing guidance document.

**DESERT TORTOISE HABITAT MANAGEMENT**

Here it appears that there will be some site specific environmental analysis in conformance with NEPA before implementation of the management actions in the proposed alternative. In general, I feel strongly that there should not be any OHV racing in Desert Tortoise habitat of all types.

**WILD HORSE AND BURRO MANAGEMENT**

56-6 Again, much needed further environmental analysis should take place to determine how much resource damage is occurring from wild horse and burro populations. What specific justification does the BLM have for comparing wild burros with other resource values, since they are a non native, exotic species? Also, What scientific justification is there for modified/designed wildlife habitat developments to mitigate the impacts on wild burro populations? Wild burros reduce the quality of the recreational experience and clearly damage environmental resources and should not be managed for a "sustainable population", however that can be determined for burros.
In summary, I feel that this Amendment/Environmental Assessment is fundamentally flawed for the following reasons:

1. Very sketchy or non existent information or scientific analysis of the six planning issues to comment on or make a decision on an alternative.
2. Flawed environmental and socio-economic reasoning to support the proposed alternative especially as it relates to recreation.
3. "Tiering off" of important components of various planning issues to be dealt with later with no public involvement.

Because of these issues, I do not believe this document is in compliance with the BLM's NEPA or FLPMA obligations. Therefore I am requesting that further analysis be done in an E.I.S. I do not support the proposed alternative.

Thank you for your consideration.

Sincerely,

Paul Pierce

Paul C. Pierce
Outing Committee, Sierra Club, Rincon Group

57

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**SIERRA CLUB**

**Grand Canyon Chapter · Arizona**

January 31, 1995

William Childress
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Rd.
Phoenix, AZ 85027

Dear Mr. Childress,

The Rincon Group of the Sierra Club, representing approximately 2000 members in the greater Tucson area, is pleased is present our comments to the Draft Lower Gila Resource Area Amendment/Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Management Framework Plan (Draft EA).

General Comments

57-1 1. The Rincon Group believes that an Environmental Impact Statement is warranted due to the nature of the proposed actions. This document contemplates an entirely new management approach to the Lower Gila Resource Area. This new approach, however, provides the public with little, if any, specific information on BLM's future activities. An Environmental Assessment is entirely inadequate for such sweeping management changes. The Rincon Group is concerned that these changes will have significant impacts, especially on threatened or endangered species and cultural resources. The BLM has either not completely investigated these impacts or is ignoring them.

2. The Draft EA presents no real alternatives to the public. This document is an "all or nothing" proposal. Either the BLM goes forward with its proposed alternative or it stays with the status quo. There are, however, many different approaches that can be, and should be, taken. Different aspects of the proposed alternative could be combined with the no action alternative. For example, all of the proposed alternative except oil and gas development could be presented. Oil and gas development could be approached as it is in the No Action Alternative. Similarly, the wild burro management plans could be maintained as status quo and
57-2 other portions of the proposed alternative could be advanced. Of primary importance is the Off-Vehicle Designation and Management.

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57

57-2 Several alternatives could be presented in this regard. The Draft EA opens up the entire resource area to vehicle use, limiting use to designated routes. The Sierra Club suggests that the Lower Gila North Area be designated "limited" and the other areas remain status quo. We oppose opening currently closed areas to vehicle use.

GR 3. Most importantly, if the proposed alternative is adopted and the management plans are amended, many significant actions can be taken without further public comment. For example, if this amendment is adopted, the BLM can go forward with its plans to establish both long and short-term campgrounds. Since the management plan outlines such plans, no further public involvement is required. This could happen in spite of the dearth of information regarding the planned camping facilities. While we question the legality of this procedure, the Sierra Club has experienced this very situation with the Forest Service. The Forest Service has adopted broad, vague management plans which allow significant projects to proceed many years after the management plan is adopted. Those projects are not subject to public comment or appeal since they are included, albeit vaguely, in the management plan. The Sierra Club urges BLM to reject this approach and issue a specific, detailed Environmental Impact Statement for this important area.

While the Rincon Group supports many of the ideas presented in the Draft EA, we cannot support the Proposed Alternative as presented in this document. This document is vague, general, and lacks specific documentation for almost all of the potential impacts of the plan amendments. Much more detail is necessary for a draft plan which presents such sweeping changes to management of this resource area. The Sierra Club, therefore, supports the No Action Alternative until a proper Environmental Impact Statement is issued for the Lower Gila Resource Area.

Specific Comments

57-3 1. Why is more acreage proposed for disposal in the No Action Alternative than in the Proposed Alternative? (Pages 7 and 12)

57-4 2. Why is no acreage proposed for acquisition in the Proposed Alternative while almost 11,000 acres is proposed under the existing management plan? (Pages 7 and 12)

57-5 3. The Sierra Club opposes opening the Resource Area to oil and gas exploration under the Proposed Alternative. The Draft EA mentions several times that oil and gas reserves are speculative, at best. While the Draft EA mentions that only 10 exploration wells are contemplated, the plan amendment would not limit oil and gas development. Under the No Action Alternative, each request requires a plan amendment, which would involve public comment and appeal. The Proposed Alternative replaces plan amendments with simple leases, with no public comment or appeal. The Sierra Club supports the current approach. A further alternative would be to

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57-5 withdraw the entire resource area from oil and gas development, since few areas are economically viable for oil and gas development. This alternative is not presented.

57-6 4. The Sierra Club supports the No Action Alternative with respect to wild horse and burro management. Burros, in particular, do not belong in the desert and are exotic species. As such, they should not be encouraged. The only rationale given for abandoning the current management approach is that some visitors may enjoy viewing "wild" burros. This is not an adequate reason to allow non-indigenous species to thrive and expand in a fragile environment.

57-2 5. The proposed opening of the Resource Area to vehicles is not consistent with management of desert tortoise habitat. The Draft EA (page 18) merely limits new competitive courses, it does not address any other aspect of increased vehicle use.

6. The Club supports ending the "open" off-highway vehicle designation on the Lower Gila North. However, this area should be studied further for locations that should be closed entirely to vehicles. Limiting vehicle use to designated routes is a good start, however.

57-7 7. The Sierra Club opposes opening currently closed areas to vehicle use, such as Vekol Valley and Coffeepot.

57-8 8. The Sierra Club urges BLM to further delineate off-highway vehicle use (page 20). We suggest a category for "primitive" vehicles, such as mountain bikes or hang gliders, which do not contain motors. Certain areas can be opened to these vehicles while remaining closed for motorized vehicles.

9. The Draft EA (page 22) describes evaluating decadent racecourses for upgrading and reauthorization. Why not evaluate such racecourses for closure and revegetation?

GR 10. The discussion of long-term and short-term camping facilities (pages 25-27) is entirely inadequate. Suitable areas should be designated so that the public may make informed comments. As drafted, the public has no indication of location or number of such facilities.

11. The Sierra Club believes that the entire Chapter 4 is inadequate and downplays the impact of encouraged and increased use of the Resource Area. The Club believes the Proposed Alternative would have significant impacts on endangered or threatened species, areas of critical environmental concerns, cultural resources, riparian areas and wilderness. All of these areas are glossed over in the Draft EA.

Once again, The Sierra Club appreciates the opportunity to make comments on the Draft EA. We strongly urge the BLM to conduct a detailed Environmental Impact Statement before proceeding further with management plan amendments of this magnitude.

**57**

Sincerely,

Richard W. McKee
Conservation Chair, Vice-Chair
Rincon Group, Sierra Club
1531 E. Orange Grove Rd.
Tucson, AZ 85718

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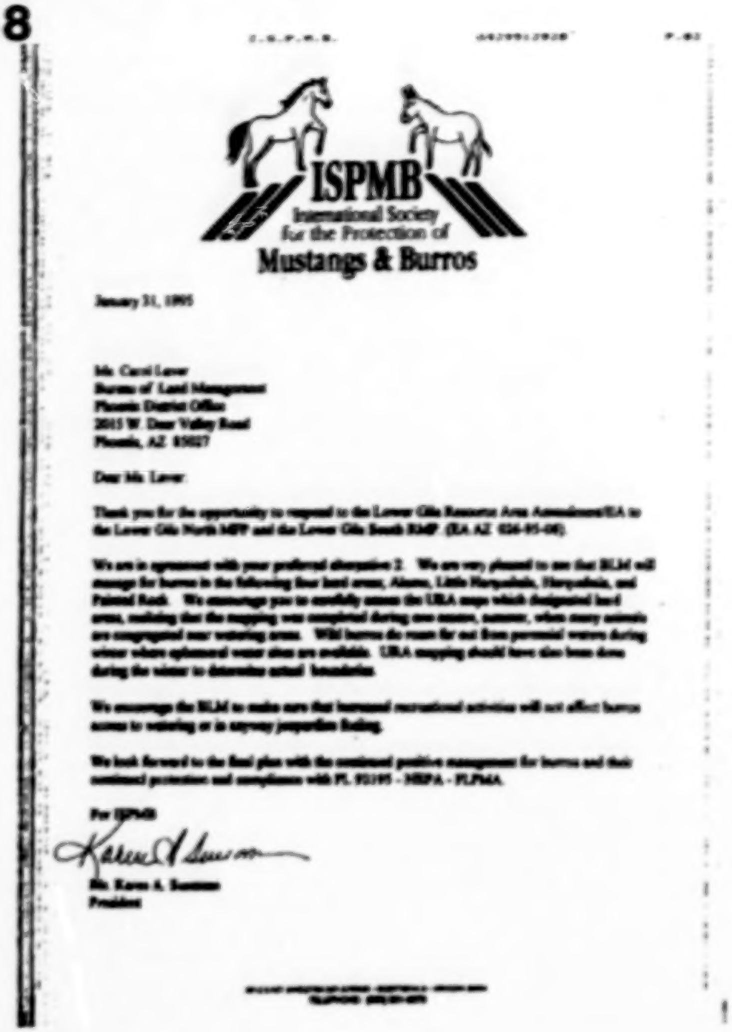

I.S.P.M.B.

ISPMB
International Society
for the Protection of
Mustangs & Burros

January 31, 1995

Ms. Carol Lowe
Bureau of Land Management
Phoenix District Office
2015 W. Deer Valley Road
Phoenix, AZ 85027

Dear Ms. Lowe:

Thank you for the opportunity to respond to the Lower Gila Resource Area Amendment/EA to the Lower Gila North MFP and the Lower Gila South RMP (EA AZ 026-95-08).

We are in agreement with your preferred alternative 2. We are very pleased to see that BLM will manage for burros in the following four herd areas, Alamo, Little Harquahala, Harquahala, and Painted Rock. We encourage you to carefully assess the URA maps which designated herd areas, realizing that the mapping was completed during one season, summer, when many animals are congregated near watering areas. Wild burros do roam far out from perennial waters during winter where ephemeral water sites are available. URA mapping should have also been done during the winter to determine actual boundaries.

We encourage the BLM to make sure that increased recreational activities will not affect burros access to watering or in anyway jeopardize foaling.

We look forward to the final plan with the continued positive management for burros and their continued protection and compliance with PL 92195 - NEPA - FLPMA.

For ISPMB

Karen A Sussman

Ms. Karen A. Sussman
President

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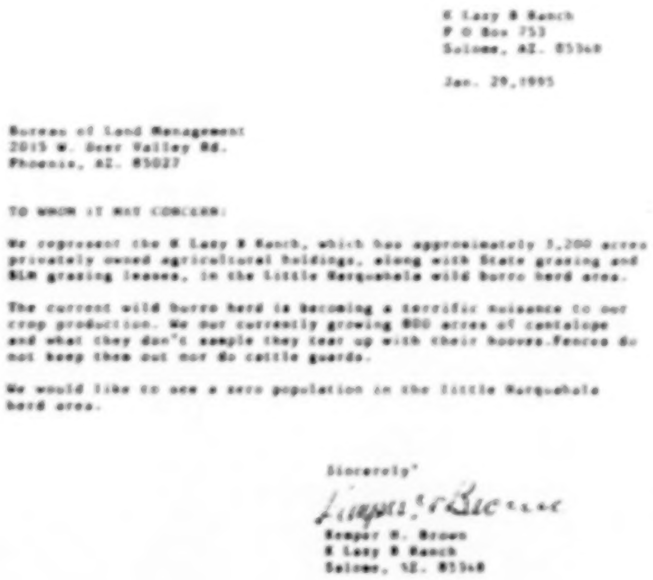

K Lazy B Ranch
P O Box 753
Salome, AZ. 85348

Jan. 29,1995

Bureau of Land Management
2015 W. Deer Valley Rd.
Phoenix, AZ. 85027

TO WHOM IT MAY CONCERN:

We represent the K Lazy B Ranch, which has approximately 3,200 acres privately owned agricultural holdings, along with State grazing and BLM grazing leases, in the Little Harquahala wild burro herd area.

The current wild burro herd is becoming a terrific nuisance to our crop production. We our currently growing 800 acres of cantalope and what they don't sample they tear up with their hooves.Fences do not keep them out nor do cattle guards.

We would like to see a zero population in the Little Harquahala herd area.

Sincerely'

Kemper H. Brown
K Lazy B Ranch
Salome, AZ. 85348

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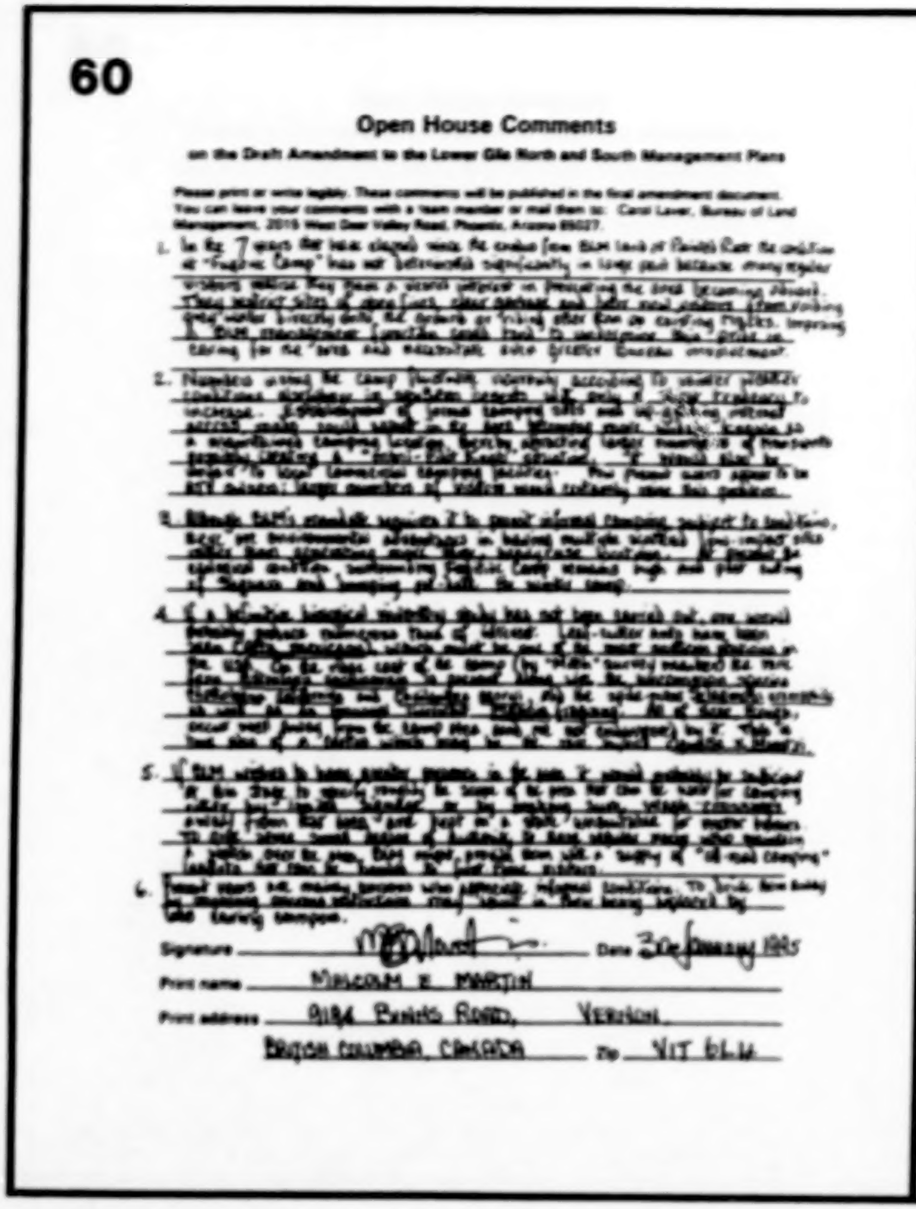

## Open House Comments

on the Draft Amendment to the Lower Gila North and South Management Plans

Please print or write legibly. These comments will be published in the final amendment document. You can leave your comments with a team member or mail them to: Carol Lever, Bureau of Land Management, 2015 West Deer Valley Road, Phoenix, Arizona 85027.

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible]
5. [illegible]
6. [illegible]

Signature ______ Date 30 January 1995

Print name MALCOLM E MARTIN

Print address 9184 BANKS ROAD, VERNON

BRITISH COLUMBIA, CANADA Zip V1T 6L4

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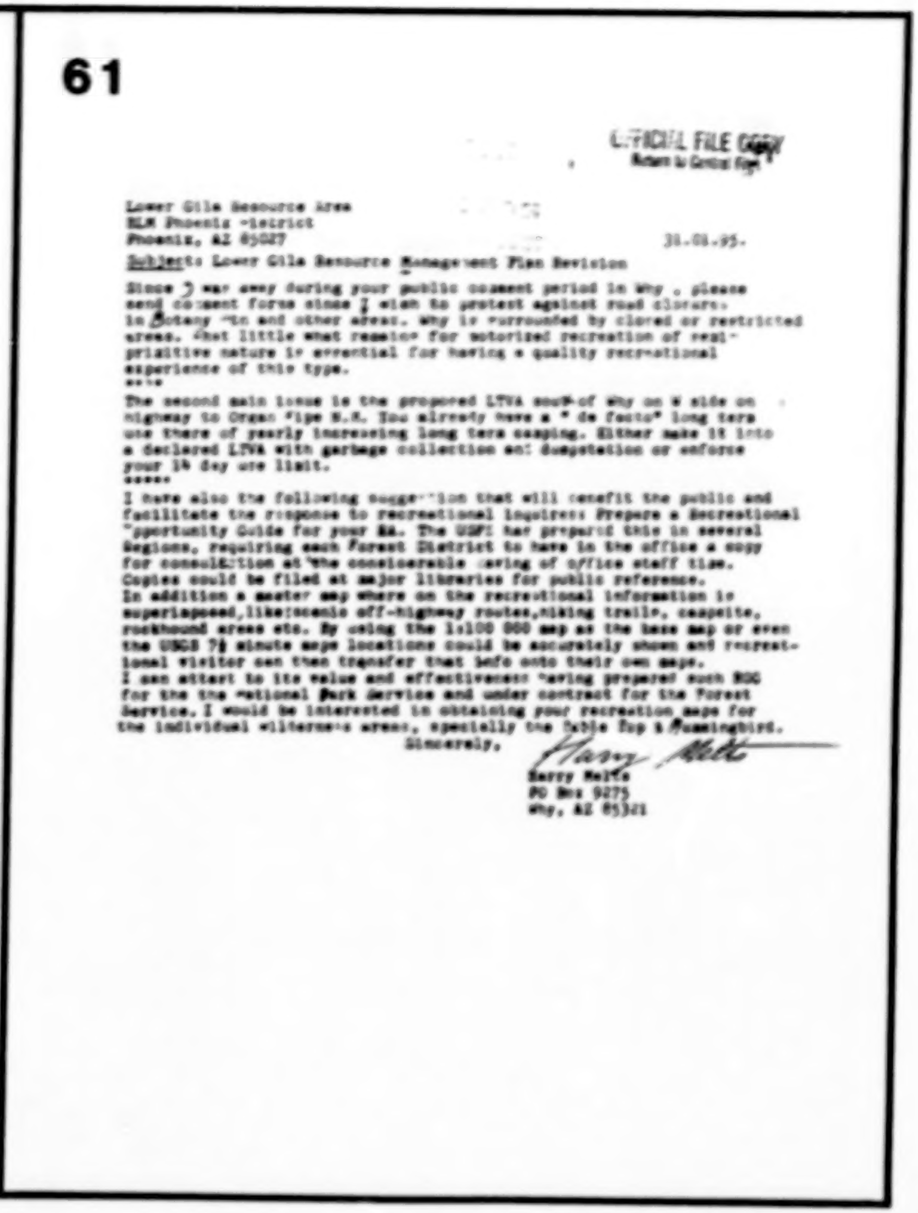

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Lower Gila Resource Area
BLM Phoenix District
Phoenix, AZ 85027

31.01.95.

Subject: Lower Gila Resource Management Plan Revision

Since I was away during your public comment period in Why , please send comment forms since I wish to protest against road closures in Botany Mtn and other areas. Why is surrounded by closed or restricted areas. What little what remains for motorized recreation of semi-primitive nature is essential for having a quality recreational experience of this type.

****

The second main issue is the proposed LTVA south of Why on W side on highway to Organ Pipe N.M. You already have a " de facto" long term use there of yearly increasing long term camping. Either make it into a declared LTVA with garbage collection and dumpstation or enforce your 14 day use limit.

*****

I have also the following suggestion that will benefit the public and facilitate the response to recreational inquires: Prepare a Recreational Opportunity Guide for your RA. The USFS has prepared this in several Regions, requiring each Forest District to have in the office a copy for consultation at the considerable saving of office staff time. Copies could be filed at major libraries for public reference.
In addition a master map where on the recreational information is superimposed,like:scenic off-highway routes,hiking trails, campsite, rockhound areas etc. By using the 1:100 000 map as the base map or even the USGS 7½ minute maps locations could be accurately shown and recreational visitor can then transfer that info onto their own maps.
I can attest to its value and effectiveness having prepared such ROG for the the National Park Service and under contract for the Forest Service. I would be interested in obtaining your recreation maps for the individual wilderness areas, specially the Table Top & Hummingbird.

Sincerely,

Harry Melte

Harry Melte
PO Box 9275
Why, AZ 85321

The following letter was received after the close of the comment period

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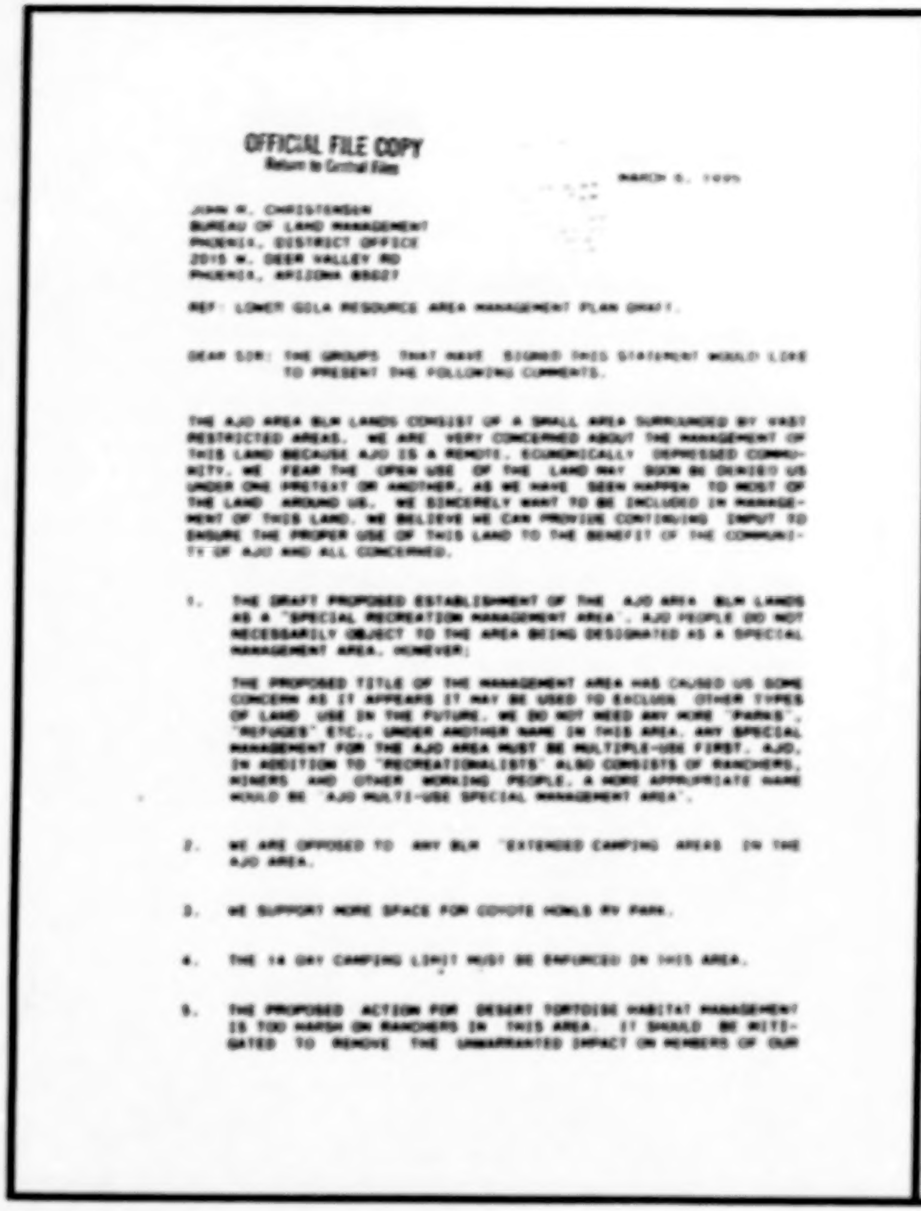

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MARCH 6, 1995

JOHN R. CHRISTENSEN
BUREAU OF LAND MANAGEMENT
PHOENIX, DISTRICT OFFICE
2015 W. DEER VALLEY RD
PHOENIX, ARIZONA 85027

REF: LOWER GILA RESOURCE AREA MANAGEMENT PLAN DRAFT.

DEAR SIR: THE GROUPS THAT HAVE SIGNED THIS STATEMENT WOULD LIKE TO PRESENT THE FOLLOWING COMMENTS.

THE AJO AREA BLM LANDS CONSIST OF A SMALL AREA SURROUNDED BY VAST RESTRICTED AREAS. WE ARE VERY CONCERNED ABOUT THE MANAGEMENT OF THIS LAND BECAUSE AJO IS A REMOTE, ECONOMICALLY DEPRESSED COMMUNITY. WE FEAR THE OPEN USE OF THE LAND MAY SOON BE DENIED US UNDER ONE PRETEXT OR ANOTHER, AS WE HAVE SEEN HAPPEN TO MOST OF THE LAND AROUND US. WE SINCERELY WANT TO BE INCLUDED IN MANAGEMENT OF THIS LAND. WE BELIEVE WE CAN PROVIDE CONTINUING INPUT TO ENSURE THE PROPER USE OF THIS LAND TO THE BENEFIT OF THE COMMUNITY OF AJO AND ALL CONCERNED.

1. THE DRAFT PROPOSED ESTABLISHMENT OF THE AJO AREA BLM LANDS AS A "SPECIAL RECREATION MANAGEMENT AREA". AJO PEOPLE DO NOT NECESSARILY OBJECT TO THE AREA BEING DESIGNATED AS A SPECIAL MANAGEMENT AREA, HOWEVER;

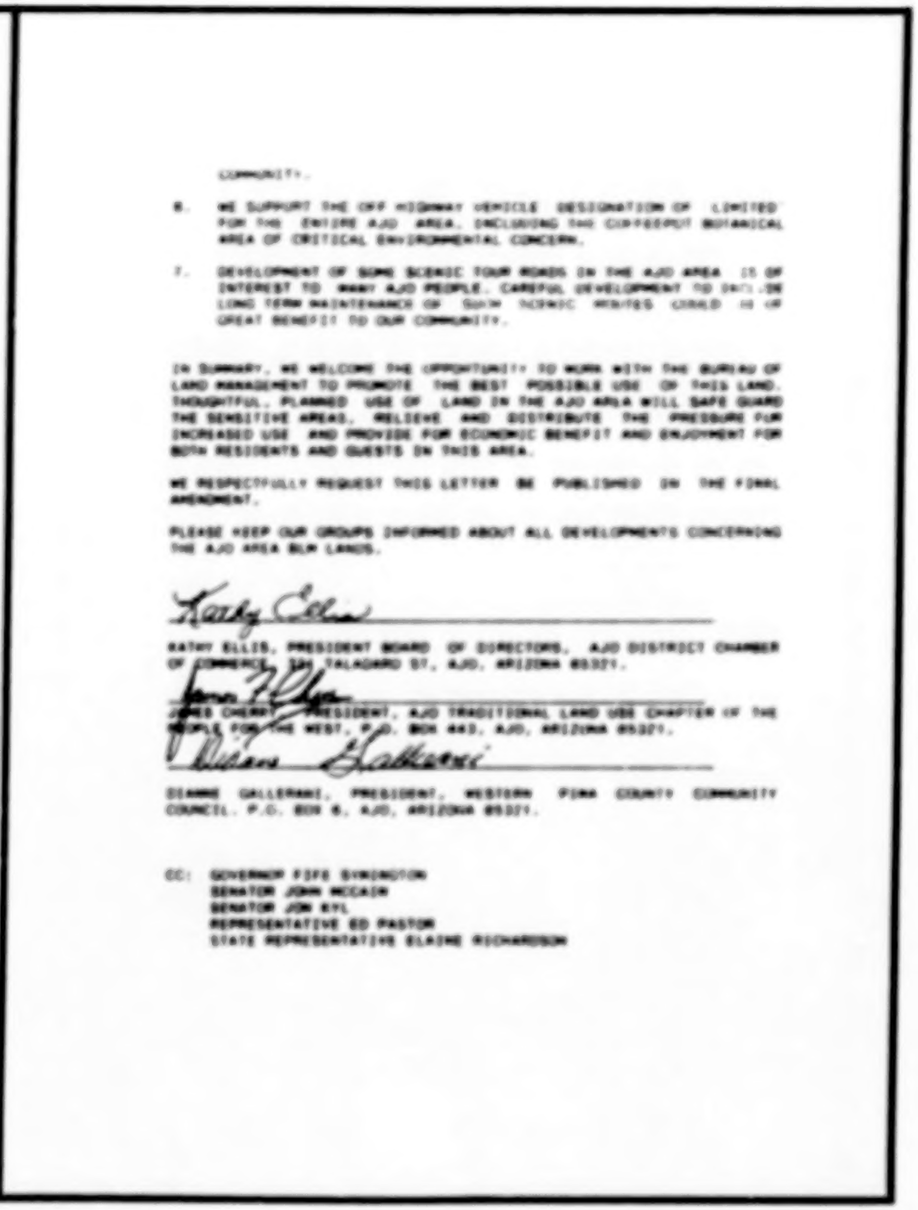
   THE PROPOSED TITLE OF THE MANAGEMENT AREA HAS CAUSED US SOME CONCERN AS IT APPEARS IT MAY BE USED TO EXCLUDE OTHER TYPES OF LAND USE IN THE FUTURE. WE DO NOT NEED ANY MORE "PARKS", "REFUGES" ETC., UNDER ANOTHER NAME IN THIS AREA. ANY SPECIAL MANAGEMENT FOR THE AJO AREA MUST BE MULTIPLE-USE FIRST. AJO, IN ADDITION TO "RECREATIONALISTS" ALSO CONSISTS OF RANCHERS, MINERS AND OTHER WORKING PEOPLE. A MORE APPROPRIATE NAME WOULD BE "AJO MULTI-USE SPECIAL MANAGEMENT AREA".

2. WE ARE OPPOSED TO ANY BLM "EXTENDED CAMPING" AREAS IN THE AJO AREA.

3. WE SUPPORT MORE SPACE FOR COYOTE HOWLS RV PARK.

4. THE 14 DAY CAMPING LIMIT MUST BE ENFORCED IN THIS AREA.

5. THE PROPOSED ACTION FOR DESERT TORTOISE HABITAT MANAGEMENT IS TOO HARSH ON RANCHERS IN THIS AREA. IT SHOULD BE MITIGATED TO REMOVE THE UNWARRANTED IMPACT ON MEMBERS OF OUR COMMUNITY.



6. WE SUPPORT THE OFF HIGHWAY VEHICLE DESIGNATION OF "LIMITED" FOR THE ENTIRE AJO AREA, INCLUDING THE COFFEEPOT BOTANICAL AREA OF CRITICAL ENVIRONMENTAL CONCERN.

7. DEVELOPMENT OF SOME SCENIC TOUR ROADS IN THE AJO AREA IS OF INTEREST TO MANY AJO PEOPLE. CAREFUL DEVELOPMENT TO INCLUDE LONG TERM MAINTENANCE OF SUCH SCENIC ROUTES COULD BE OF GREAT BENEFIT TO OUR COMMUNITY.

IN SUMMARY, WE WELCOME THE OPPORTUNITY TO WORK WITH THE BUREAU OF LAND MANAGEMENT TO PROMOTE THE BEST POSSIBLE USE OF THIS LAND. THOUGHTFUL, PLANNED USE OF LAND IN THE AJO AREA WILL SAFE GUARD THE SENSITIVE AREAS, RELIEVE AND DISTRIBUTE THE PRESSURE FOR INCREASED USE AND PROVIDE FOR ECONOMIC BENEFIT AND ENJOYMENT FOR BOTH RESIDENTS AND GUESTS IN THIS AREA.

WE RESPECTFULLY REQUEST THIS LETTER BE PUBLISHED IN THE FINAL AMENDMENT.

PLEASE KEEP OUR GROUPS INFORMED ABOUT ALL DEVELOPMENTS CONCERNING THE AJO AREA BLM LANDS.

Kathy Ellis

KATHY ELLIS, PRESIDENT BOARD OF DIRECTORS, AJO DISTRICT CHAMBER OF COMMERCE, 321 TALADRO ST., AJO, ARIZONA 85321.

JAMES CHERRY, PRESIDENT, AJO TRADITIONAL LAND USE CHAPTER OF THE PEOPLE FOR THE WEST, P.O. BOX 443, AJO, ARIZONA 85321.

Dianne Gallerani

DIANNE GALLERANI, PRESIDENT, WESTERN PIMA COUNTY COMMUNITY COUNCIL. P.O. BOX 6, AJO, ARIZONA 85321.

CC: GOVERNOR FIFE SYMINGTON
SENATOR JOHN MCCAIN
SENATOR JON KYL
REPRESENTATIVE ED PASTOR
STATE REPRESENTATIVE ELAINE RICHARDSON

# Responses to Comments

GR Decisions authorizing site-specific actions will be determined through plans conducted with public participation and environmental analysis. These plans will address all recreation elements.

10-1 Individual federal actions, such as a land disposal or development proposal, will require the standard National Environmental Policy Act (NEPA) review, which includes public notification. Appropriate Native American Tribes will be notified and consulted. During this notification and consultation process, results of the environmental work, including archaeological work, will be shared with any interested tribe. At that time, identification by the tribe of cultural properties or sites of religious or cultural importance to that tribe would be requested by the BLM. If a property or properties are identified, further consultation between the tribe and the BLM would take place regarding that property or properties.

10-2 Many cultural resource surveys have been performed on BLM lands in the planning units, parts of which are within the traditional territory of the Yavapai. This information at the Phoenix Field Office is available to qualified researchers.

13-1 The facilities in question are maintained and operated by the Corps of Engineers and, as such, are not administered by the BLM.

13-2 As specified in the amendment, camping areas will be posted.

18-1 Refer to Response 13-2.

23-1 The proposed action changes the off-highway vehicle designation of the areas of critical environmental concern from closed to limited. This will allow the BLM to establish motorized vehicle routes within the area of critical environmental concern. The issues will be addressed in the future.

24-1 Mountain bikes and other mechanized conveyances are referred to as special recreation vehicles. Several types of emerging recreational technologies are developing that pose a potential for surface disturbance, erosion, destruction of vegetation and uncontrolled creation of tracks or trails. To ensure protection of the resource and promote orderly development of high-quality recreational opportunities, it is necessary to manage these technologies based upon the potential for resource disturbances.

24-2 The BLM proposed a variety of camping experiences in the amendment to respond to increasing numbers of visitors and to resolve existing and potential resource conflicts.

25-1 Off-highway vehicle races are authorized on existing routes and during the least active periods for the desert tortoise.

27-1 The BLM is mandated by the Wild and Free-Roaming Horse and Burro Act and Interior Board of Land Appeals decisions to manage wild burros as self-sustaining populations which contain the optimum number of wild burros in a thriving natural ecological balance with other multiple-use resource components.

27-2 Based on resource conditions, management of an area of critical environmental concern may be modified through the planning process.

27-3 Resource conflicts could be justification for closure or modification of vehicle routes, whether they are roads, trails or washes.

27-4 Appendix A, as modified, lists lands identified for disposal by legal description (township, range and section). As individual proposals are received to dispose of these lands, the BLM will conduct inventories and surveys and prepare an environmental analysis to dispose of specific parcels. The lands identified in the disposal area will provide for community expansion and private economic development.

27-5 The existing conveyance of mineral interest program allows the private surface landowner to acquire federal minerals.

27-6 The impacts to Sonoran pronghorn have been analyzed in a biological assessment addressing issues within the scope of this resource management plan amendment. Any impacts identified to pronghorn or other listed or proposed species or their habitats have been resolved through Section 7 consultation/conference with the U.S. Fish and Wildlife Service.

28-1 The BLM has adjusted the management area boundaries to include a half-mile buffer zone north of Interstate 8 that would stay in federal ownership to maintain scenic values. The remaining lands will remain available for community expansion. Refer to Map 5 Central.

29-1 Policy directs the BLM to avoid any action that would contribute to the listing of a special status species. The BLM will determine if there is a significant conflict between desert bighorn sheep and desert tortoise through the National Environmental Policy Act process, subject to public review.

29-2 The definition for "natural potential" appears in the Glossary of the final amendment. The criteria for achieving natural potential will be developed, utilizing an interdisciplinary team of Arizona Game and Fish Department specialists, pertinent outside interest groups and BLM staff.

29-3 The term "thriving natural ecological balance" is in the Glossary of this document.

29-4 The BLM's interdisciplinary habitat monitoring will factor in all habitat components including annual vegetation.

32-1 The BLM has reconsidered the disposal areas around Ajo and now proposes to retain portions of secs. 7 and 18 due to their relatively low potential for use by the community. The other areas will remain in disposal for community enhancement and expansion which includes parks, municipal facilities and commercial and residential uses.

33-1 Refer to Response 23-1.

33-2 The BLM has long managed livestock grazing in desert tortoise habitat with success. The reference to individual rancher's hardships has been removed from the text due to its inaccuracy. Actions taken while the species is a candidate will hopefully prevent it from being listed, which would have the potential of creating even greater hardships on the ranching community. The consequences under the proposed action alternative are the same as those under the no-action alternative in Chapter 4.

33-3 BLM signs are standardized nationwide to enable visitors to easily identify public lands. The Barry Goldwater Air Force Range signs help to protect the health and safety of individuals who may otherwise inadvertently trespass onto the bombing range.

34-1 The action described in Placeritas Canyon refers to a separate environmental assessment. These comments have been forwarded to appropriate staff for analysis.

34-2 The BLM has found the closed designation to be unwarranted, based on resource data.

37-1 The BLM has adjusted the management area boundary to help protect the scenery along Route 93 and the wildlife corridor from the river to upland areas. All land exchanges will be conducted between willing parties.

37-2 Refer to Response 34-2.

37-3 See Response GR. In addition, the BLM coordinates with adjoining land management agencies in addressing impacts resulting from recreational activities.

37-4 Refer to Response 27-3.

38-1 The Saddle Mountain Special Recreation Management Area plan will address site-specific issues. Interested publics will have an opportunity to participate in that process.

38-2 The special recreation management area designation does not affect private lands.

40-1 Refer to Response 23-1.

40-2 Refer to Response 33-2.

40-3 Refer to Response 33-3.

41-1 The referenced burros that traverse onto the Barry Goldwater Range and other lands within the Ajo Management Area are domestic burros belonging to the Tohono O'odham people. The BLM will continue to work with the tribe in the capture and removal of these animals and will analyze opportunities to eliminate the future drifting of such animals onto the subject lands.

41-2 Special recreation management areas are designated in response to recreational conflicts, unmet recreational opportunities and recreational activities requiring special management. The designation does not imply increased recreational use. Implementing the no action alternative will perpetuate existing management practices.

43-1 The BLM has reevaluated prescriptions in Appendix A, which became Table 1 in the final plan. Table 1 better compares the differences among existing decisions in the Lower Gila North Management Framework Plan, the Lower Gila South Resource Management Plan and the two alternatives analyzed in this amendment. Some of the prescriptions were replaced due to new data, guidelines and reanalysis of resource conditions.

43-2 On page 2, the wording of the first sentence under Relationship to statutes, regulations and other plans has been changed.

43-3 The BLM will design appropriate monitoring for desert tortoise through the interdisciplinary team process. The Desert Tortoise Recovery Plan was written specifically for the Mohave population, although some elements may apply to the Sonoran population and may be considered by the interdisciplinary team.

43-4 Refer to page 22, second column, for the reworded statement in bold italics.

43-5 The proposed action will authorize evaluation of this action within the activity plan for off-highway vehicle management. It is not feasible to sign all routes designated open in the near future. As problem areas are identified, the BLM will manage off-highway vehicles through signing, on-the-ground law enforcement and public education.

43-6 The proposed action adopts the Strategy for Desert Tortoise Habitat Management on Public Lands in Arizona (BLM 1990). That strategy identifies objectives and goals that the BLM will implement within the planning units. The Phoenix Field Office will adhere to the objectives pertaining to livestock grazing to ensure no net loss of quality and quantity of desert tortoise habitat.

43-7 As stated on pages 7 and 23 of this document, the Phoenix Field Office is mandated to manage wild burros in a thriving natural ecological balance. This would preclude burro management that would adversely impact desert tortoise habitat or populations.

43-8 On page 34, the document has been changed regarding extended camping areas to read: "Location outside of Category I desert tortoise habitat; Mitigation if located in category II or III desert tortoise habitat."

43-9 Phoenix Field Office staff are aware of a breeding pair of peregrine falcons and have included them in the biological assessment for the Section 7 consultation.

43-10 The Phoenix Field Office has consulted with the U.S. Fish and Wildlife Service regarding burro management within Southwestern willow flycatcher habitat.

43-11 A map of the Three Rivers Riparian Area of Critical Environmental Concern has been added to Appendix D.

44-1 As stated on page 12 of the draft amendment and page 20 of the final amendment under Acquisitions, "All acquisitions will be negotiated with willing landowners only and must be in the public interest."

46-1 Estimated acreage within the planning units has been added to the plan on page 3[illegible].

46-2 Section 7 of the Endangered Species Act will not apply for these planning units unless the Sonoran population of desert tortoise is upgraded to a candidate or proposed species or is listed as threatened or endangered. Implementing the Arizona strategy in this plan amendment is in accordance with Section 2 of the Endangered Species Act. Refer to page 22 for the modified bullet item.

46-3 A reasonable alternative may be avoiding category I, II or III habitat.

46-4 Category III habitat has been added to the document (see pages 21 and 22).

46-5 Refer to pages 46 and 47 for an expanded analysis of environmental consequences on major resources and authorizations.

46-6 Cumulative impacts are analyzed within the scope of this plan amendment.

47-1 The proposed action will authorize the evaluation of off-highway vehicle uses. Routes determined to be unacceptable for off-highway vehicle use will be considered for single or multiple use.

47-2 See Table 4 in Appendix E for correction.

47-3 The state prison proposal has been dropped. Mitigation or compensation will be required when tortoise habitat will be affected by the issuance of a lease, permit, right-of-way or other land use authorization.

47-4 The BLM has included the large block of land south and west of the park in the Gila Bend Management Area for potential park use. There are some isolated parcels of land north of Interstate 10 that will remain in the disposal area (see Map 5 Central).

47-5 Mountainous areas adjacent to the White Tanks Regional Park will be retained for open space and made available to local and state governments for park use.

48-1 Refer to Response 29-2.

48-2 The spelling of Quilotosa on page 35 has been corrected.

49-1 Refer to Response 43-1.

49-2 As stated in this amendment, for impact analysis, the BLM is asserting that proper management of a species in thriving natural ecological balance with its habitat precludes habitat or species degradation.

49-3 This level of detail for establishing monitoring is not appropriate for a land use plan and will instead be determined by an interdisciplinary team.

49-4 The new federal grazing regulations are being implemented. Parts of the new grazing regulations may require an amendment to the land use plans and grazing environmental impact statements. The BLM is evaluating the need for an amendment.

50-1 Refer to Response 47-4.

50-2 Refer to Response 43-6. In addition, no information or data currently identify forage requirements for the Sonoran desert tortoise population.

50-3 The BLM has established two vehicle designations -- off-highway and special recreation. Refer to the Glossary and Component 1 of the proposed action. Upon evaluation of this comment letter, the BLM feels that the reference to trails is the appropriate terminology to use in defining off-highway/special recreation vehicle designations. The BLM recognizes that it is appropriate for some trails to be used by motorized vehicles.

50-4 Refer to Response 23-1.

52-1 The draft document was in error. What is represented in the final document is not an expansion of the Alamo Herd Management Area. It reaffirms the boundary outlined in the Lower Gila North Management Framework Plan overlay.

54-1 Refer to Response 27-6. The BLM has conducted Section 7 consultation with the U.S. Fish and Wildlife Service on listed species regarding issues within the scope of this resource management plan amendment.

54-2 Interior Board of Land Appeals decisions 88-591, 88-638, 88-648 and 88-679 have altered the BLM's approach to wild burro management. Emphasis currently is on managing wild burro populations in a thriving natural ecological balance in concert with other multiple-use resource components.

54-3 The BLM acknowledges the jurisdictional and management responsibility of the Corps of Engineers and the Department on the actual withdrawn lands covered by the Alamo Lake withdrawal (Public Land Order 492), excepting grazing administration that is retained by the BLM for livestock grazing under the terms of the Taylor Grazing Act. The final resource management plan amendment has acknowledged these management authorities and clarified any management prescriptions proposed for the Three Rivers Riparian Area of Critical Environmental Concern that fall within the Alamo Lake withdrawal and Department license area. The BLM actions that do not fall within the BLM's administrative authority will only be done in cooperation with the Department. The BLM's position is that lands subject to the 1948 withdrawal are "public lands" under the Federal Land Policy and Management Act. While the 1948 withdrawal was complete and effective as to "all forms of appropriation under the public lands laws, including the mining and mineral leasing laws," it was not absolute. The BLM still had (and continues to have) a role with respect to grazing administration. Lands subject to such administration, even though grazing is but one of the specified multiple uses, are by definition "administered by the Secretary of the Interior through the Bureau of Land Management" and therefore "public lands" under Section 103(e) of the Federal Land Policy and Management Act. Hence, the BLM retains the responsibility to manage wild horses and burros on grazing lands subject to the 1948 withdrawal.

54-4 Refer to Response 52-1.

54-5 This statement in the plan amendment information anticipated the controversy surrounding burro distribution maps and is not the proposed action. The Alamo Herd Management Area boundary was incorrect on the draft map and has been corrected.

54-6 That terminology is defined in the Glossary of this document.

54-7 The BLM, in establishing the herd management area which encompasses the Santa Maria River, recognized the need to resolve conflicting resource issues. The BLM is mandated to manage wild burros in a thriving natural ecological balance with other multiple-use resource components, including riparian resources and the Southwestern willow flycatcher and its habitat. The BLM has conducted Section 7 consultation on proposed and listed species.

54-8 The BLM's interdisciplinary habitat monitoring will factor in all habitat components including annual vegetation and habitat needs to maintain a healthy riparian system. The BLM is mandated by the Wild Horse and Burro Act to manage wild burros in a thriving natural ecological balance in concert with other multiple-use resource components.

54-9 The management of the Little Harquahala Burro Herd Area is addressed in this document.

54-10 The BLM is mandated to remove nuisance burros upon request from private landowners. In addition, refer to pages 47 and 48 of this document for an expanded analysis of environmental consequences relative to the Wild Horse and Burro Management proposed action.

54-11 Refer to Response 49-2.

54-12 As stated on page 19 of the proposal in the draft document and on pages 7 and 48 of the final document, the BLM is mandated to maintain wild burros within the confines of designated herd area boundaries. Wild burros outside of these areas will be considered excess animals and removed through a live capture program.

54-13 The plan amendment does not propose any portion of the herd management area for designation as a wild and free-roaming burro range.

54-14 The final resource management plan amendment contains a larger scale map.

54-15 The "Mountain Sheep Ecosystem Management Strategy on Public Lands: A Lifeline into the Future" has been finalized. ***However, the BLM believes that full public involvement in review of actions and associated impacts to support implementation of the sheep plan could not be realized if incorporated into the final plan amendment. Therefore, the plan will not be formally adopted in this plan amendment.***

54-16 The objective statements are directly out of the Arizona Strategy Plan. The BLM recognizes the Arizona Game and Fish Department's authority for managing species and understands that the BLM will continue to coordinate with the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service. Note on page 19 of the draft that the BLM will cooperate with the Arizona Game and Fish Department on reintroduction and augmentation of desert bighorn sheep.

54-17 Note that the word "or" has been substituted on page 24 as suggested so that the sentence now reads: "This will be done in areas where conflicts with other uses and resources do not occur or where conflicts can be resolved."

54-18 Note that the word "significantly" has been added to the statement on page 24.

54-19 The proposed action will authorize the development of an off-highway vehicle plan to determine acceptable vehicle routes.

54-20 Refer to Response 43-8.

54-21 The term "ephemeral" on page 31 of the draft document has been changed to "intermittent." Refer to the Glossary for definitions.

54-22 Note the changes made on pages 39 and 49 regarding Yuma clapper rails and peregrine falcons.

54-23 The BLM has reevaluated the analysis of threatened and endangered species and wildlife in the no action and proposed action alternatives. Refer to pages 48 and 51.

54-24 Augmentations do not require approval through the resource management plan process; however, the BLM took this opportunity to reaffirm the existing position on supporting augmentation of desert bighorn sheep within the planning units.

55-1 Special recreation management areas are designated for recreational opportunities and resource protection to prevent "sacrifice areas."

55-2 Refer to 54-19.

55-3 The management area boundaries established in the draft amendment (now the final amendment) include areas that could reasonably be acquired to provide wildlife corridors and riparian areas. It is the BLM's intent to cooperatively manage wildlife corridors and riparian areas with all interested private parties and government agencies.

56-1 High-impact developments will be in areas exhibiting previous surface disturbance or low resource values.

56-2 Through the planning process to establish camping areas, the BLM will consider the proximity of privately owned camping operations as well as other criteria.

56-3 Note the change in the document on page 32 clarifying that the 100 to 500 vehicles applies to each established long-term visitor area.

56-4 Refer to Response 34-2.

56-5 All public lands disposals shall be publicized in local newspapers and/or in the Federal Register. Information concerning the specific disposals will be made available to the public at the local BLM office. All National Environmental Policy Act documentation will be completed prior to any disposal action. Exact acreages have not been compiled for acquisition lands because of the uncertainty of their availability. Only lands with high resource values will be considered for acquisition within the management areas.

56-6 The BLM's interdisciplinary habitat monitoring will factor in all habitat components including annual vegetation. The BLM is mandated by the Wild Horse and Burro Act to manage wild burros in a thriving natural ecological balance in concert with other multiple-use resource components. However, there may be situations where wild burros are excluded from a particular development if such exclusion will not adversely affect the wild burro population.

57-1 If, through the decision document, it has been determined that significant impacts will occur as a result of the selected alternative(s), an environmental impact statement would be required.

57-2 No portion of the planning units is proposed for designation as open regarding off-highway vehicle use. The proposed action classifies the off-highway vehicle designation as limited.

57-3 The acreage figures for the disposal lands in the no action alternative differ from those of the proposed alternative. The no action alternative identifies more lands for disposal; the proposed action identifies fewer lands for disposal due to their location within the management areas. Through the reevaluation of these lands, the resource specialists have determined that more lands should be retained based on their potential resource values.

57-4 Exact acreages have not been compiled for acquisition lands because of the uncertainty of their availability. Only available lands with high resource values will be considered for acquisition within the management areas.

57-5 The BLM is required under supplemental program guidance to address oil and gas exploration and development in this plan amendment. The Mining and Minerals Policy Act of 1970 directs the Secretary of the Interior to carry out a policy to foster and encourage orderly development of domestic mineral resources. Closing all of both planning units to potential exploration and development of oil and gas would be contrary to this policy. Each application and permit to drill requires National

Environmental Policy Act documentation subject to 30-day review and comment.

57-6 Refer to Response 27-1.

57-7 Refer to Response 23-1.

57-8 The proposed action authorized development of an off-highway and special recreation vehicle plan which will evaluate these issues as well as rehabilitation of commercial and competitive race courses.

# Glossary

**Activity Plan**: A detailed, specific plan for management of a single resource program or plan element undertaken as necessary to implement the more general resource management plan decisions.

**Allotment**: An area of land assigned to one or more livestock operators for grazing livestock. It generally consists of public lands but may also include state-owned and private lands. An allotment may include one or more separate pastures. Livestock numbers and seasons of use are specified for each allotment.

**Allotment management plan**: A livestock grazing management plan for a specific allotment based on multiple-use resource management objectives. It considers livestock grazing in relation to other uses of the range and in relation to renewable resources -- watershed, vegetation and wildlife. It also establishes the seasons of use, the number of livestock to be permitted on the range and the rangeland developments needed.

**Alternatives**: Different ways of addressing the planning issues and management activities considered in the planning process. These serve to provide the decisionmaker and the public a clear basis for choices among options.

**Area of critical environmental concern**: An area of public lands where special management attention is required to protect important historic, cultural or scenic values, fish and wildlife or natural systems or processes or to protect life and safety from natural hazards.

***Augmentation: The act of releasing animals or plants to maintain or enlarge an existing population of the same species within a specified area.***

**Backcountry byways**: Backcountry roads and vehicle trails that the BLM designates and promotes for their high scenic and public interest values. As part of the National Scenic Byway System, these byways vary from single-track bike trails to narrow, low-speed, paved roads.

**Bajada**: A broad, gently inclined slope or outwash plane at the foot of a mountain, formed by the coalescing of alluvial fans.

**Block/blocked up**: Consolidated, for example, landownership.

**Categories I, II and III**: Classification of desert tortoise habitat based upon importance of habitat, resolvability of conflicts, density of tortoises and stability of populations (see Table 4 in Appendix B).

**Category 1**: Species for which the U.S. Fish and Wildlife Service has sufficient (but not necessarily complete) information on vulnerability and threats to support a proposal to list them as threatened or endangered.

**Category 2**: Species for which the U.S. Fish and Wildlife Service has insufficient information to support a proposed rule to add them to the threatened or endangered species list. Further biological research and field study will usually be needed to change the status of these species.

**Category 3A**: Species for which the U.S. Fish and Wildlife Service has persuasive evidence of extinction.

**Category 3B**: Species that are considered to be invalid by the U.S. Fish and Wildlife Service. Such species could be reevaluated in the future on the basis of subsequent research.

**Category 3C**: Species that are more abundant or widespread than previously believed by the U.S. Fish and Wildlife Service and/or not subject to any identifiable threat. Should further research or changes in land use indicate decline in any of these species, they may be reevaluated for possible inclusion in category 1 or 2 or listed as threatened or endangered.

**Closed area**: An area where off-highway ***or special recreation*** vehicle use or camping is

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prohibited. Use of vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

Community: A group of plants and animals living together in a common area and having close interactions.

**Cultural property**: Any definite location of past human activity, habitation or use identified through a field inventory, historical documentation or oral evidence. This term may include archaeological or historic sites, structures and places and sites or places of traditional cultural or religious importance to a specific group whether or not represented by physical remains. Cultural properties are managed by the system of inventory, evaluation, protection and use.

**Cultural resources**: A broad, general term for any cultural property (as defined above) or any traditional lifeway value. A traditional lifeway value is an abstract, nonmaterial idea important in maintaining a cultural group's traditional religious beliefs, cultural practices or social interaction. Unlike cultural properties, traditional lifeway values are not closely identified with definite locations.

**Desired plant community**: One that produces the kind, amount and proportions of vegetation needed to meet or exceed the resource management plan/activity plan objective established for the site. It must be within the site's capability to produce the desired vegetation through natural succession, management intervention or both.

**Disposal**: A transaction that leads to the transfer of title of public lands from the federal government.

**Ecological site**: A distinctive kind of land that differs from other kinds of lands in its ability to produce a characteristic natural plant community. A ecological site is the product of all the environmental factors responsible for its development. It is capable of supporting a native plant community typified by an association of species that differs from that of other ecological sites in the kind or proportion of species or in total production.

**Economic impact**: The change, positive or negative, in economic conditions (including distribution and stability of employment and income in affected local and regional economies) that directly or indirectly result from an activity, project or program.

**Ecosystem**: A complex, self-sustaining natural system which includes living and nonliving components of the environment and the circulation of matter and energy between organisms and their environment.

**Endangered**: Any species in danger of extinction throughout all or a significant portion of its range.

**Environmental assessment**: The procedure for analyzing the impacts of some proposed action on a given environment and the documentation of the analysis. It is similar to an environmental impact statement but is generally smaller in scope. An environmental assessment ***may*** be preliminary to an environmental impact statement.

**Environmental consequence**: A change in the human environment caused by an act of man. The change should be perceptible, measurable and relatable through a change agent to a proposed action or alternative. Consequences are the same as impacts and effects. In Council on Environmental Quality regulations, consequences are caused by a proposed action (40 CFR 1508.7; 1508.14).

**Environmental impact statement**: An analytical document prepared for use by decision makers to weigh the environmental consequences of a potential decision. It should accurately portray potential impacts to the environment of a particular course of action and its possible alternatives.

**Ephemeral**: A stream that flows only briefly after a storm or during snowmelt.

**Extensive Recreation Management Area**: An area where recreation is unstructured and dispersed and where minimal recreation facilities are required. It provides recreation visitors the freedom of choice with minimal regulatory constraint.

**Fair Market Value**: The amount in cash, or in terms reasonably equivalent to cash, for which in all probability a leasable mineral deposit would be sold or leased by a knowledgeable owner willing but not obligated to sell or lease to a knowledgeable ***purchaser*** who desires but is not obligated to buy or lease.

**Federal Land Policy and Management Act of 1976**: Public Law 94-579, which gives the BLM legal authority to establish public land policy, to establish guidelines for administering such policy and to provide for the management, protection, development and enhancement of the public lands.

**Floodplain**: The nearly level lowland that borders a stream or river and is subject to flooding.

**Forage**: Vegetation of all forms available for animal consumption.

**Goal**: The desired state or condition that a resource management policy or program is designed to achieve. It is usually not quantifiable and may not have a specific date by which it is to be completed. Goals are the bases from which objectives are developed.

**Grazing System**: The rotation of livestock through an allotment, designed to accomplish management objectives.

**Habitat**: A specific set of physical conditions that surround a single species, a group of species or a large community. In wildlife management, the major components of habitat are considered to be food, water, cover and living space.

**Habitat Management Plan**: A written and officially approved plan for a specific geographic area which identifies wildlife habitat and related objectives, establishes the sequence of actions for achieving objectives and outlines procedures for evaluating accomplishments.

**Hazardous Waste**: Any substance that poses a threat to the health or safety of persons or the environment, including any material that is toxic, ignitable, corrosive or radioactive.

***Herd Area: The geographic area identified as having been used by a herd as its habitat in 1971.***

***Herd Management Area: A herd area identified in a management framework plan or resource management plan for long-term management of a wild horse or burro herd.***

**Herd Management Area Plan**: A plan for the management of a geographic area used by wild horses or burros. It outlines details of a burro or horse capture plan, adoption program and long-term management of populations.

**Interdisciplinary**: A cooperative, interactive consultation and analysis approach among individuals representing two or more disciplines. Such an approach should ensure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making [National Environmental Policy Act 102(2)(A)].

***Intermittent: As it relates to source dependability, springs that discharge only during certain periods but at other times of the year are dry; streams with alternating surface and subsurface flow; stock ponds are not intermittent.***

**Isolated Parcels**: Those parcels of public lands surrounded by nonfederal lands.

**Issue**: See **Planning issues** (page 3).

**Land and Water Conservation Fund**: A federally maintained fund used for acquiring and developing federal outdoor recreation resources and for assisting states in planning, acquiring and developing land and water areas and facilities for outdoor recreation.

**Leasable Minerals**: Minerals such as coal, oil shale, oil and gas, phosphate, potash, sodium, geothermal resources and all other minerals that may be acquired under the Mineral Leasing Act of 1920, as amended.

**Limits of Acceptable Change**: A system in which the amount of allowable change of physical and social conditions is defined; the management actions needed to prevent further change are identified and monitoring and evaluating procedures are established.

**Limited Area**: An area restricted at certain times, in certain areas and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the categories of: numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads and trails; use on designated roads and trails; and other restrictions.

***Long-term Visitor Area: A parcel established to provide winter visitors with long-term camping opportunities. A permit allows use from September 15 to April 15 for self-contained recreational vehicles with minimum 10-gallon waste water tank. Supplementary rules exist and Golden Access/Golden Age passes are not accepted.***

***Management Area: An administrative unit of blocked-up lands in the planning units, used for resource management, planning, land tenure adjustments and budgeting.***

**Management Framework Plan**: A planning decision document prepared before ***the effective date of the regulations implementing the land use planning provisions of*** the Federal Land Policy and Management Act.

**Mineral Entry**: The location of mining claims by an individual to protect the individual's right to a valuable mineral.

**Mineral Estate**: Mineral or subsurface ownership.

**Mineral Material**: ***Materials such as*** sand, building and decorative stone, gravel, pumice, clay or petrified wood. ***Common variety mineral materials may be acquired under the Materials Act of 1947, as amended.***

**Mining Plan of Operation**: A plan for mining exploration and development that an operator must submit to the BLM for approval when more than five acres a year will be disturbed or when an operator plans to work in an area of critical environmental concern, wilderness study area or wilderness. A mining plan of operation must document in detail all actions the operator plans to take from exploration through reclamation and present all information needed for preparing a National Environmental Policy Act document.

**Mitigation**: The lessening ***or elimination*** of a potential adverse effect by applying appropriate protection measures, ***e.g.***, the recovery of cultural resource data.

**Mitigation Measures**: Methods used (often included as stipulations or special conditions attached to a ***decision***) to reduce the significance of or eliminate an anticipated environmental impact.

**Monitoring**: The orderly collection and analysis of ***data*** to evaluate progress in meeting resource management objectives.

**Multiple-use**: Management of public lands and their resources so that they are used in the combination best meeting the present and future needs of the American people. Relative resource values are considered, not necessarily the combination of uses that will give the greatest potential economic return or the greatest unit output.

**National Environmental Policy Act**: A federal law that establishes policy, sets goals and provides means to ensure that environmental information is available to public officials and citizens before decisions are made and actions are taken.

**National Historic Preservation Act**: The primary federal law providing for the protection and preservation of cultural resources. Making it a national policy to preserve cultural heritage, the National Historic Preservation Act established the National Register of Historic Places, the Advisory Council on Historic Preservation and State Historic Preservation officers.

**National Register of Historic Places**: A list of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology and culture maintained by the Secretary of the Interior; expanded as authorized by Section 2(b) of the Historic Sites Act of 1935 (16 U.S.C. 462) and Section 101(a)(1)(A) of the National Historic Preservation Act.

***Natural Potential: The population level a species can attain, given the capacity of its habitat.***

***Off-Highway Vehicle: Any motorized vehicle capable of, or designed for, travel on or immediately over land, water or other natural terrain, excluding: (1) any nonamphibious registered motorboat, (2) any military, fire, emergency or law enforcement vehicle while being used for emergency purposes, (3) any vehicle whose use is expressly authorized by the authorized officer or otherwise officially approved, (4) vehicles in official use, (5) any combat or combat support vehicle when used in times of national defense emergencies and (6) wheelchairs when used by the disabled.***

**Off-Highway *and Special Recreation* Vehicle Designations**:

*Open*: Designated areas and trails where vehicles may be operated (subject to operating regulations and vehicle standards set forth in BLM Manual 8341 and 8343).

*Limited*: Designated areas and trails where the use of vehicles is subject to restrictions, such as limiting the number or type of vehicles allowed, dates and times of use (seasonal restrictions), limiting use to designated or existing roads and trails. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

*Closed*: Designated areas, roads and trails where the use of vehicles is permanently or temporarily prohibited. Emergency use of vehicles is allowed.

**Patent**: A government instrument (or deed) that conveys legal title for public lands to an individual or another government entity.

***Perennial: As it relates to source dependability, wells where water is available continuously; springs and streams with a continuous surface discharge; stock ponds where water is ponded up through the year.***

**Planning Criteria**: The standards of rules and other factors developed by the manager and interdisciplinary team for their use in forming judgments about decision making, analysis and data collection during planning.

**Proper Functioning Condition** (riparian): One which maintains a stable flow regime, can absorb and dissipate energy of floodwaters, has a stable vegetative cover of all ages of plants (representing all species appropriate for the area), filters out sediment from the water, improves water quality and provides food, water, shade and cover for wildlife.

**Public Participation**: Part of the BLM's planning system that provides the opportunity for citizens as individuals or groups to express local, regional and national perspectives and concerns in the rule making, decision making, inventory and planning processes for public lands. This includes public meetings, hearings or advisory boards or panels that may review resource management proposals and offer suggestions or criticisms for the various alternatives considered.

**Range Improvement**: An authorized activity or program on or relating to rangelands which is designed to improve production of forage, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions and provide habitat for livestock, wild horses and burros and wildlife. The term includes, but is not limited to, structures, treatment projects and use of mechanical means to accomplish the desired results.

**Recreation Opportunity Spectrum**: A classification system for inventory, planning and management of recreation resources. It divides land into six classes ranging from urban to primitive.

***Reestablishment: The act of releasing or planting native species into habitat formerly occupied by that species for the purpose or intent of creating self-sustaining populations in the wild state.***

**Rehabilitation**: Restoration of damaged or lost environment as nearly as possible to its original state.

**Resource Area**: An administrative subdivision of a BLM district ***replaced in 1997 by field office***.

**Resource Management Plan**: A written land use plan that outlines the BLM's decisions and strategies for management of the resources in a particular area, replacing the management framework plan in the BLM's planning system.

**Right-of-Way**: The legal right for use, occupancy or access across land or water areas for a specified purpose or purposes. Also, the lands covered by such a right.

**Riparian Habitat**: Lands directly influenced by permanent water and having visible characteristics, e.g., vegetation, reflective of the presence of permanent water, i.e., surface and/or subsurface.

***Road: Vehicle route which has been improved and maintained by mechanical means to ensure relatively regular and continuous use.***

**Scenic Corridor**: The area encompassing the foreground-middleground zone along roadways.

**Scoping**: An early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action. It may involve public meetings, field interviews with representatives of agencies and interest groups, discussions with resource specialists and managers, written comments in response to news releases, direct mailings and articles about the proposed action and scoping meetings.

**Sediment**: Soil or mineral material transported by water and deposited in streams or other bodies of water.

**Semi-primitive Motorized Recreation**: Those recreation opportunities available in backcountry areas with natural settings and having little or no development, where visitor use is relatively low and few visitor controls are apparent and in which travel by motorized vehicle is permitted.

**Sensitive Species** (plants and animals): Species occurring on public lands which require special management attention to protect it and the important resources or other natural systems or processes on which it depends.

**Special Recreation Management Area**: An area requiring explicit recreation management to achieve the BLM's recreation objectives and to provide specific recreation opportunities. ***The resource management plan identifies special recreation management areas and defines management objectives.***

***Special Recreation Vehicles: Mechanized equipment, designed to provide a mechanical advantage, intended for human conveyance. This includes, but is not limited to, mountain bikes, ultralights and hang gliders. This does not include wheelchairs when used by the disabled.***

**Special Status Species**: Wildlife and plant species either federally listed or proposed for listing as endangered or threatened, state-listed or BLM-determined priority status.

**Stipulation**: A requirement, usually dealing with protection of the environment, that is made a part of a lease, grant or other authorizing document.

**Threatened Species**: Any plant or animal species that is likely to become an endangered species within the foreseeable future throughout all or a significant part of its range.

***Thriving Natural Ecological Balance: The condition existing when wild horses and burros and other resource components (and their habitats) are maintained in a healthy, self-sustaining and productive condition.***

**Trail**: As related to vehicle designations, a single track route designated or constructed for off-highway ***or special recreation*** vehicle use. It does not include game trails, cow trails, etc.

**Utilization**: The proportion or degree of a current year's forage production that is consumed or destroyed by animals (including insects). It may refer to either a single plant species, a group of species or the vegetation as a whole. Utilization is synonymous with use.

**Vegetation type**: A plant community with distinguishable characteristics.

***Vehicle Route: A track, established and maintained solely by the passage of an off-highway vehicle or special recreation vehicle, regularly used for travel.***

***Visual Resource Management Classes:***

***Class I: Provides primarily for natural ecological changes only. It is applied to primitive areas, some natural areas and similar situations where management activities are to be restricted.***

***Class II: Changes in any of the basic elements (form, line, color or texture) caused by a management activity should not be evident in the characteristic landscape.***

***Class III: Changes in the basic elements caused by a management activity may be evident in the characteristic landscape, but the changes should remain subordinate to the visual strength of the existing character.***

***Class IV: Changes may subordinate the original composition and character but must reflect what could be a natural occurrence within the characteristic landscape.***

**Watershed**: All land and water within the confines of a drainage divide.

**Wetlands**: Lands including swamps, marshes, bogs and similar areas such as wet meadows, river overflows, mud flats and natural ponds.

***Wilderness: An area officially designated by Congress, managed to preserve characteristics of naturalness and solitude and devoted to the public purposes of conservation and recreational, scenic, scientific, educational and historical uses.***

**Wildlife**: All species of mammals, birds, fish, amphibians and reptiles found in a wild state.

***Wildlife Corridors: Lands needed for maintaining or reconnecting natural habitat islands to facilitate traditional movement, migration, genetic interchange and population expansion of native wildlife species.***

**Withdrawn Lands**: An area of federal land withheld from settlement, sale, location or entry under some or all of the general land laws in order to maintain other public values in the area or reserving the area for a particular public purpose or program; transferring jurisdiction over an area of federal lands from one department, bureau or agency to another department, bureau or agency.

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# Appendices

**Appendix A**

# Lands identified for disposal (parcels will be considered on a case-by-case basis) not inclusive; some small parcels may not be listed

| Township/Range | Section | Subdivision | Acres |
|---|---|---|---|
| T. 1 N., R. 3 W. | 3 | S½SE¼SW¼; | 20.00 |
| | 7 | W½NE¼, E½NW¼. | 160.00 |
| T. 1 N., R. 4 W. | 1 | lots 1 through 4, incl., S½N½; | 320.64 |
| | 11 | SE¼SW¼, SE¼; | 200.00 |
| | 12 | all; | 640.00 |
| | 13 | NE¼NE¼, E½NW¼***NE¼***, SW¼NW¼NE¼, N½N½SE¼NW¼, ***NE¼NW¼***; | ***120.00*** |
| | 14 | N½NE¼. | 80.00 |
| T. 6 N., R. 4 W. | 11 | SW¼SW¼; | 40.00 |
| | 14 | SE¼NE¼, SE¼SE¼; | 80.00 |
| | 23 | NW¼NE¼. | 40.00 |
| T. 1 N., R. 5 W. | 27 | SE¼SW¼. | 40.00 |
| ***T. 2 N., R. 5 W.*** | ***36*** | ***N½NE¼SW¼, SW¼NE¼SW¼, W½SW¼, W½SE¼SW¼.*** | ***130.00*** |
| T. 3 N., R. 5 W. | 22 | all; | 640.00 |
| | 23 | S½; | 320.00 |
| | 25 | all; | 640.00 |
| | 26 | W½; | 320.00 |
| | 27 | all; | 640.00 |
| | 34 | W½; | 320.00 |
| | 35 | W½. | 320.00 |
| T. 1 N., R. 6 W. | 1 | E½SW¼, W½SE¼; | 160.00 |
| | 17 | SE¼; | 160.00 |
| | 20 | N½NE¼. | 80.00 |
| T. 4 N., R. 6 W. | 25 | NW¼NW¼. | 40.00 |
| T. 7 N., R. 6 W. | 17 | S½NW¼SW¼, N½SW¼SW¼; | 40.00 |
| | 18 | SE¼NE¼SE¼, NE¼SE¼SE¼; | 20.00 |
| | ***27*** | ***N½, SW¼, N½SE¼, SW¼SE¼;*** | ***600.00*** |
| | ***34*** | ***N½NW¼.*** | ***80.00*** |
| T. 2 N., R. 7 W. | 17 | W½NW¼; | 80.00 |
| | 31 | lots 1 and 2, NE¼, E½NW¼***, lot 3 (portion north of Buckeye-Salome road), NE¼SW¼ (portion north of Buckeye-Salome road), N½SE¼ (portion north of Buckeye-Salome road)***. | 317.89 |

## Appendix A (continued)

# Lands identified for disposal

| Township/Range | Section | Subdivision | Acres |
|---|---|---|---|
| T. 7 N., R. 7 W. | 16 | all; | 640.00 |
| | 33 | NW¼. | 160.00 |
| T. 8 N., R. 7 W. | 10 | S½SE¼; | 80.00 |
| | 11 | S½SW¼, SW¼SE¼; | 120.00 |
| | 14 | NW¼NE¼, NW¼, N½SW¼; | 280.00 |
| | 15 | NE¼, E½SE¼. | 240.00 |
| T. 2 N., R. 8 W. | 7 | ***lots 3 and 4, lot 2 (portion south of Interstate 10);*** | ***300.00*** |
| | ***9*** | ***E½W½ (portion south of Interstate 10), SE¼ (portion south of Interstate 10);*** | ***2.50*** |
| | 34 | all. | 640.00 |
| T. 2 N., R. 9 W. | 8 | all. | 640.00 |
| T. 3 N., R. 9 W. | 31 | lots 1 and 2, E½NW¼; | 240.00 |
| | 32 | SW¼SE¼, S½SE¼SE¼ ***(portion southwest of Buckeye-Salome road***). | 60.00 |
| T. 2 N., R. 10 W. | 2 | lots 1 through 4, incl., S½N½, S½; | 639.84 |
| | 11 | all. | 640.00 |
| T. 3 N., R. 10 W. | 8 | SW¼SW¼, S½SE¼SW¼; | 60.00 |
| | 25 | SW¼NW¼ ***(portion southwest of Buckeye-Salome road).*** | 40.00 |
| T. 2 N., R. 11 W. | 1 | lots 1 through 4, incl., S½N½, SE¼. | 480.00 |
| T. 3 N., R. 11 W. | 2 | lots ***1 through 4***, S½N½, S½. | ***640.33*** |
| T. 3 N., R. 12 W. | ***16*** | ***all;*** | ***640.00*** |
| | 27 | ***NW¼***; | ***160.00*** |
| | 36 | all. | 640.00 |
| T. 2 S., R. 1 W. | 25 | NW¼, SW¼; | 320.00 |
| | 26 | N½, SE¼; | 480.00 |
| | 27 | E½; | 320.00 |
| | 34 | NE¼; | 160.00 |
| | 35 | all. | 640.00 |
| T. 3 S., R. 1 W. | 1 | ***lots 3 and 4, S½NW¼***; | 160.00 |
| | 3 | SE¼; | 160.00 |
| | 4 | SE¼; | 160.00 |
| | 6 | lots 1 through 7, incl., S½NE¼, SE¼NW¼, E½SW¼, NE¼SE¼. | 509.96 |

## Appendix A (continued)

# Lands identified for disposal

| Township/Range | Section | Subdivision | Acres |
|---|---|---|---|
| T. 1 S., R. 2 W. | 30 | lot 1; | 39.87 |
| | 31 | lots 3 and 4, E½SW¼; | 159.92 |
| | 32 | SW¼SW¼, SE¼; | 200.00 |
| | 36 | ***E½E½***, NE¼NE¼NW¼NE¼, SW¼NE¼, ***W½SE¼.*** | ***282.50*** |
| T. 2 S., R. 2 W. | 5 | lots 1 and 2, SE¼NE¼; | 117.29 |
| | 6 | N½SE¼; | 80.00 |
| | 18 | lots 1 and 2, E½NW¼; | 153.47 |
| | 28 | NW¼NE¼NE¼, N½SW¼NE¼NE¼, S½NE¼SW¼NE¼, N½SE¼SW¼NE¼, S½SW¼SW¼NE¼, N½NE¼NE¼NW¼, NW¼NE¼NW¼, SE¼SE¼NW¼, W½W½SW¼, SW¼NE¼SW¼, NW¼SE¼SW¼, S½SE¼SW¼, N½NE¼SE¼, SW¼NE¼SE¼, S½NE¼NW¼SE¼, S½SE¼NW¼SE¼, S½NE¼SW¼SE¼, SE¼SW¼SE¼, S½SW¼SW¼SE¼; | 195.00 |
| | 33 | NW¼NE¼NE¼, W½NE¼, W½SE¼NE¼, S½NE¼SE¼NE¼, SE¼SE¼NE¼, N½NE¼NW¼, SE¼NE¼NW¼, SW¼NW¼NW¼, E½SE¼NW¼. | 175.00 |
| T. 3 S., R. 2 W. | 1 | SW¼SW¼. | ***40.00*** |
| T. 1 S., R. 3 W. | 25 | ***N½NE¼, W½SW¼NE¼, W½E½SW¼NE¼, W½W½SE¼, W½E½W½SE¼.*** | ***170.00*** |
| ***T. 2 S., R. 4 W.*** | ***36*** | ***all.*** | ***640.00*** |
| T. 3 S., R. 4 W. | ***2*** | ***SW¼, S½NW¼;*** | ***240.00*** |
| | ***14*** | ***S½N½NW¼,S½N½N½NW¼;*** | ***60.00*** |
| | 27 | NE¼. | 160.00 |
| T. 4 S., R. 4 W. | 3 | SE¼; | 160.00 |
| | 10 | E½; | 320.00 |
| | 22 | E½W½; | 160.00 |
| | 27 | E½W½. | 160.00 |
| T. 5 S., R. 4 W. | 27 | SE¼SE¼. | 40.00 |
| T. 6 S., R. 4 W. | 19 | lots 3 and 4, E½, E½SW¼; | 473.39 |
| | 31 | lots 1 and 2, NE¼, E½NW¼. | 313.81 |
| T. 12 S., R. 5 W. | 19 | E½NE¼, SW¼NE¼, E½SW¼, SE¼; | 360.00 |
| | 30 | E½, E½W½. | 480.00 |

## Appendix A (continued)

# Lands identified for disposal

| **Township/Range** | **Section** | **Subdivision** | **Acres** |
|---|---|---|---|
| T. 13 S., R. 5 W. | 25 | SW¼SE¼; | 40.00 |
| | ***25*** | ***E½NE¼NW¼NW¼;*** | ***5.00*** |
| | ***25*** | ***E½SW¼SE¼NW¼, NW¼NE¼NE¼SW¼, N½NW¼NE¼SW¼, SE¼NE¼NW¼SW¼, N½S½NW¼NE¼SW¼;*** | ***17.50*** |
| | ***25*** | ***SE¼SE¼NW¼SW¼;*** | ***2.50*** |
| | 35 | ***E½SE¼ (portion east of Highway 85).*** | 30.00 |
| T. 1 S., R. 6 W. | 4 | SW¼NW¼, W½SE¼NW¼, SE¼SE¼NW¼; | 70.00 |
| | 5 | lot 3, SE¼NW¼. | 81.86 |
| T. 12 S., R. 6 W. | ***10*** | ***E½NE¼NE¼, W½SE¼NE¼, NE¼SE¼NE¼, S½SE¼SE¼NE¼, W½NW¼NW¼, SE¼NW¼NW¼, E½NE¼SW¼NW¼, NE¼NW¼SW¼;*** | ***100.00*** |
| | 11 | N½, SW¼, E½SE¼; | 560.00 |
| | 12 | NW¼; | 160.00 |
| | ***22*** | ***M.S. 3895 in the SW¼;*** | ***21.00*** |
| | ***27*** | ***lots 3 and 4, M.S. 4316 in the SW¼ and unsurveyed lot in the W½;*** | ***2.00*** |
| | ***33*** | ***SE¼SW¼NE¼, NE¼SW¼SE¼;*** | ***20.00*** |
| | ***35*** | ***lots 6 and 9.*** | ***40.84*** |
| ***T. 1 S., R. 7 W.*** | ***1*** | ***S½;*** | ***320.00*** |
| | ***11*** | ***NE¼, SW¼, N½SE¼;*** | ***400.00*** |
| | ***12*** | ***N½.*** | ***320.00*** |
| T. 6 S., R. 7 W. | 15 | SW¼; | 160.00 |
| | 23 | NW¼SW¼, S½SW¼; | 120.00 |
| | 32 | W½SW¼, SE¼SW¼, SE¼. | 280.00 |
| T. 1 S., R. 9 W. | 14 | NE¼, S½NW¼; | 240.00 |
| | 16 | E½SE¼. | 80.00 |
| T. 4 S., R. 1 E. | 31 | E½; | 320.00 |
| | 34 | E½; | 320.00 |
| | 35 | W½. | 320.00 |
| T. 5 S., R. 1 E. | 2 | lots 1 through 4, incl., S½N½, S½; | 640.16 |
| | 3 | lots 1 through 4, incl., S½N½, S½; | 639.92 |
| | 9 | W½; | 320.00 |
| | 10 | all; | 640.00 |
| | 11 | W½; | 320.00 |
| | 13 | SE¼SW¼, NE¼SE¼, S½SE¼. | 160.00 |
| T. 6 S., R. 2 E. | 25 | lots 7, 8, 17 through 24, incl., S½NW¼, SW¼; | 637.56 |
| | 27 | S½S½SW¼. | 40.00 |
| T. 6 S., R. 3 E. | 33 | NW¼, S½. | 480.00 |

## Appendix A (continued)

# Lands identified for disposal

| Township/Range | Section | Subdivision | | Acres |
|---|---|---|---|---|
| T. 7 S., R. 3 E. | 3 | lots 1 through 4, incl., S½; | | 435.20 |
| | 4 | lots 1 through 4, incl., S½; | | 434.20 |
| | ***5*** | ***S½S½.*** | | ***160.00*** |
| T. 5 S., R. 4 E. | 13 | NW¼. | | 160.00 |
| T. 7 S., R. 4 E. | 10 | S½NE¼, SE¼; | | 240.00 |
| | 15 | NE¼SW¼; | | 40.00 |
| | 21 | W½SW¼; | | 80.00 |
| | 27 | all; | | 640.00 |
| | 28 | W½; | | 320.00 |
| | 34 | all; | | 640.00 |
| | 35 | W½. | | 320.00 |
| | | | **Total** | ***33,459.15*** |

## Appendix B

### Table 2. U.S. Fish and Wildlife Service special status plants and animals

| | |
|---|---|
| **Listed animals** | |
| Sonoran pronghorn *(Antilocapra americana sonoriensis)* | See text on pages 39 and 40 |
| Lesser long-nosed bat *(Leptonycteris curasoae yerbabuenae)* | |
| Gila topminnow *(Poeciliopsis occidentalis)* | |
| Desert pupfish *(Cyprinodon macularius)* | |
| Yuma clapper rail *(Rallus longirostris yumanensis)* | |
| Peregrine falcon *(Falco peregrinus)* | |
| Brown pelican *(Pelecanus occidentalis)* | |
| Bald eagle *(Haliaeetus leucocephalus)* | |
| Southwestern willow flycatcher *(Empidonax traillii extimus)* | |
| Cactus ferruginous pygmy owl *(Glaucidium brasilianum cactorum)* | |
| **Former Category 1 candidate plants *** | |
| Acuna pineapple cactus (*Echinomastus erectocentrus* var. *acunensis*) | Rare species with disjunct populations on andesite hills |
| **Former Category 2 candidate animals **** | |
| Desert tortoise *(Gopherus (Xerobates) agassizii)* | See text on page 40 |
| Chuckwalla *(Sauromalus obesus)* | LGRA-wide; similar habitat to tortoise |
| Arizona (Gilbert's) skink *(Eumeces gilberti arizonensis)* | Inhabit riparian areas in N½ LGRA |
| Rosy boa *(Lichanura trivirgata)* | Occur in several LGRA mountain ranges |
| Canyon (giant) spotted whiptail *(Cnemidophorus burti)* | Inhabit mountains 3,000+ feet |
| Mexican garter snake *(Thamnophis eques)* | Inhabit riparian areas N½ LGRA |
| Narrow-headed garter snake *(Thamnophis rufipunctatus)* | Potentially inhabit NE LGRA riparian |
| Lowland leopard frog *(Rana yavapaiensis)* | Inhabit riparian areas N½ LGRA |
| Arizona toad *(Bufo microscaphus microscaphus)* | Inhabit N½ LGRA |
| Longfin dace *(Agosia chrysogaster)* | Native fish found in Santa Maria River |
| Ferruginous hawk *(Buteo regalis)* | Winter migrant |
| Baird's sparrow *(Ammodramus bairdii)* | Winter migrant |
| Mountain plover *(Charadrius montanus)* | Winter migrant |
| Western snowy plover *(Charadrius alexandrinus nivosus)* | Migrant |
| Large-billed Savannah sparrow *(Passerculus sandwichensis rostratus)* | Rare inhabitant |
| Yuma puma *(Felis concolor browni)* | LGRA-wide; low population density |
| Spotted bat *(Euderma maculatum)* | One of Arizona's rarest bats; little data |
| Greater Western mastiff bat *(Eumops perotis californicus)* | Inhabit S½ LGRA |
| Mexican long-tongued bat *(Choeronycteris mexicana)* | Potentially occur east side LGRA |
| Southwestern cave myotis *(Myotis velifer brevis)* | Potentially occur east side LGRA |
| Occult little brown bat *(Myotis lucifugus occultus)* | Inhabit N½ LGRA |
| California leaf-nosed bat *(Macrotus californicus)* | Inhabit S½ LGRA |
| Yavapai Arizona pocket mouse *(Perognathus amplus amplus)* | Inhabit N½ LGRA |
| Harquahala Southern pocket gopher *(Thomomys umbrinus subsimilis)* | Only in Harquahala Mountain range |
| Colorado Desert fringe-toed lizard *(Uma notata)* | Potentially inhabit western LGRA dunes |

* Former U.S. Fish and Wildlife Service Category 1 candidates; currently Fish and Wildlife candidates for listing

** Former U.S. Fish and Wildlife Service Category 2 candidates; no longer Fish and Wildlife candidate species, but now being considered as a BLM sensitive species

**Table 3. Arizona Game and Fish Department special status plants and animals**

| | |
|---|---|
| **State threatened or endangered animals** | |
| Western yellow-billed cuckoo *(Coccyzus americanus occidentalis)* | Inhabits riparian areas |
| Great egret *(Casmerodius albus)* | Occur seasonally in farm fields and riparian areas |
| Osprey *(Pandion haliaetus)* | Occur seasonally at lakes and riparian areas |
| Snowy egret *(Egretta thula)* | Occur seasonally in farm fields and riparian areas |
| **State candidate animals** | |
| Common black hawk *(Buteogallus anthracinus)* | Seasonal inhabitant of riparian areas |
| Crested caracara *(Polyborus plancus)* | Potential for occurrence on SE edge of LGRA |
| Belted kingfisher *(Ceryle alcyon)* | Occur locally along Gila and Santa Maria rivers |
| Northern casque-headed frog *(Pternohyla fodiens)* | Occur in SE corner of LGRA |
| Great Plains narrow-mouthed toad *(Gastrophryne olivacea)* | Occur in SE corner of LGRA |
| **State plant diversity review** | |
| Aravaipa wood fern *(Thelypteris puberula var. sonorensis)* | Peripheral species from Mexico; disjunct population among boulders in moist canyon bottom at Peoples Spring in Peoples Canyon |
| California snakebush *(Colubrina californica)* | Relictual species scattered along desert washes; Sand Tank, Gila Bend and Sauceda mountains |
| Organ pipe cactus *(Stenocereus thurberi)* | Peripheral species from Mexico; on south-facing slopes in Little Ajo Mountains and scattered as far north as Sand Tank Mountains |
| Kofa Mountain barberry *(Berberis harrisoniana)* | Relictual species in upper ends of canyons at cliff bases; Sand Tank Mountains |
| Arizona Sonoran rosewood *(Vauquelinia californica var. sonorensis)* | Relictual species on upper slopes of canyons and along ephemeral drainages; Sand Tank Mountains |
| Mexican shrub mallow *(Malvastrum bicuspidatum ssp. bicuspidatum)* | Peripheral species from Mexico; along arroyos at the base of hills; Little Ajo Mountains |

**Table 4. Goals and criteria for three categories of desert tortoise habitat (criteria are ranked by importance to the categorization process with Criterion 1 being the most important)**

| | *Category I* | *Category II* | *Category III* |
|---|---|---|---|
| Category goals | Maintain stable, viable populations and protect existing tortoise habitat values; increase populations where possible | Maintain stable, viable populations and halt further declines in tortoise habitat values | Limit tortoise habitat and population declines to the extent possible by mitigating impacts |
| Criterion 1 | Habitat area essential to maintenance of large viable populations | Habitat area may be essential to maintenance of viable populations | Habitat area not essential to maintenance of viable populations |
| Criterion 2 | Conflicts resolvable | Most conflicts resolvable | Most conflicts not resolvable |
| Criterion 3 | Medium to high density or low density contiguous with medium or high density | Medium to high density or low density contiguous with medium or high density | Low to medium density not contiguous with medium or high density |
| Criterion 4 | Increasing, stable or decreasing population | Stable or decreasing population | Stable or decreasing population |

Appendix C

# Recreation Opportunity Spectrum Classes

## Description of ROS classes

The following chart describes each of the six Recreation Opportunity Spectrum (ROS) classes (see the Glossary) in terms of experience opportunities, setting opportunities and activity opportunities.

The descriptions provide an overview of the opportunities included in each class.

The overview statements do not describe each class in detail, but rather provide a point of departure from which the planner or manager can develop more precise prescriptions for each class based on specific situations encountered in field operations.

The listing of activity opportunities is provided for illustrative purposes and is not an all-inclusive list of activity opportunities on public lands.

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**Recreation Opportunity Spectrum (ROS) class descriptions**

| ***Opportunity class*** | ***Experience opportunity*** | ***Setting opportunity*** | ***Activity opportunity*** |
|---|---|---|---|
| Primitive | Opportunity for isolation from the sights and sounds of people, to feel a part of the natural environment, to have a high degree of challenge and risk and to use outdoor skills. | Area is characterized by essentially unmodified natural environment of fairly large size. Concentration of users if very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Only facilities essential for resource protection are provided. Spacing of groups is informal and dispersed to minimize contacts among groups. Motorized use within the area is not permitted. | Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing and river running (nonmotorized craft). |
| Semi-primitive (non-motorized) | Some opportunity for isolation from the sights and sounds of people, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk and to use outdoor skills. | Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided for the protection of resource values and the safety of users only. Spacing of groups may be formalized to disperse use and limit contacts among groups. Motorized use is not permitted. | Camping, hiking, climbing, enjoying scenery or natural features, nature study, photography, spelunking, hunting (big game, small game, upland birds, waterfowl), ski touring and snowshoeing, swimming, diving (skin and scuba), fishing, canoeing, sailing and river running (nonmotorized craft). |

**Recreation Opportunity Spectrum (ROS) class descriptions (continued)**

| ***Opportunity class*** | ***Experience opportunity*** | ***Setting opportunity*** | ***Activity opportunity*** |
|---|---|---|---|
| Semi-primitive (motorized) | Some opportunity for isolation from the sights and sounds of people, but not as important as for primitive opportunities. Opportunity to have high degree of interaction with the natural environment, to have moderate challenge and risk and to use outdoor skills. Explicit opportunity to use motorized equipment while in the area. | Area is characterized by a predominantly unmodified natural environment of moderate to large size. Concentration of users is low, but there is often evidence of other area users. On-site controls and restrictions may be present, but are subtle. Facilities are provided for the protection of resource values and the safety of users only. Spacing of groups may be formalized to disperse use and limit contacts among groups. Motorized use is permitted. | Same as above, plus off-highway vehicle use (four-wheel-drive, dune buggy, dirt bike, snowmobile, power boating). |
| Roaded natural | About equal opportunities for affiliation with other user groups and for isolation from sights and sounds of humans. Opportunity to have a high degree of interaction with the natural environment Challenge and risk opportunities are not very important except in specific challenging activities. Practice of outdoor skills may be important. Opportunities for both motorized and nonmotorized recreation are present. | Area is characterized by a generally natural environment with moderate evidence of humans. Resource modification and utilization practices are evident, but harmonize with the natural environment. Concentration of users is low to moderate with facilities sometimes provided for group activity. On-site controls and restrictions offer a sense of security. Rustic facilities are provided for user convenience as well as for safety and resource protection. Conventional motorized use is provided for in construction standards and design of facilities. | All activities listed previously plus picnicking, rock collecting, wood gathering, auto touring, downhill skiing, snowplay, ice skating, waterskiing and other water sports, hang gliding, interpretive use, rustic resorts and organized camps. |

**Recreation Opportunity Spectrum (ROS) class descriptions (continued)**

| ***Opportunity class*** | ***Experience opportunity*** | ***Setting opportunity*** | ***Activity opportunity*** |
|---|---|---|---|
| Rural | Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities. These factors are generally more important than the natural setting. Opportunities for wildland challenges, risk taking and testing of outdoor skills are unimportant, except in those activities involving challenge and risk. | Area is characterized by substantially modified natural environment. Resource modification and utilization practices are obvious. Sights and sounds of humans are readily evident and the concentration of users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for specific activities. Developed sites, roads and trails are designed for moderate to high use. Moderate densities are provided far away from developed sties. Facilities for intensive motorized use are available. | All activities listed previously plus competitive games, spectator sports, bicycling, jogging, outdoor concerts and modern resorts. |
| Modern urban | Opportunities to experience affiliation with individuals and groups are prevalent as is the convenience of sites and opportunities. Experiencing the natural environment and the use of outdoor skills are largely unimportant. | Area is characterized by a highly modified environment, although the background may have natural elements. Vegetation is often exotic and manicured. Soil may be protected by surfacing. Sights and sounds of humans on-site are predominant. Large numbers of users can be expected. Modern facilities are provided for the use and convenience of large numbers of people. Controls and restrictions are obvious and numerous. Facilities for high-intensity motor vehicle use and parking are present with forms of mass transit often available. | All activities listed previously plus competitive games, spectator sports, bicycling, jogging, outdoor concerts and modern resorts. |

**Appendix D**

# Three Rivers Riparian Area of Critical Environmental Concern

## Relevance

The Big Sandy, Santa Maria and Bill Williams rivers-Alamo Lake Complex is one of the most important desert riparian ecosystems in the state of Arizona. These particular riparian habitats are extremely valuable because of their tremendous size (including surrounding watershed), availability of year-round water, high primary productivity, diversity of vegetation and crucial habitat for endangered bald eagles and suspected habitat for breeding peregrine falcons. Both of these species are federally listed as endangered.

These rivers are free-flowing and have outstanding scenic qualities including riparian vegetation, surrounding mountains and cliff features and largely undeveloped shorelines uncluttered by human activity. They provide opportunities for solitude and water-based recreation along stretches of the streams. Access is provided to portions of each stream.

## Importance

Riparian habitats throughout the Southwest historically have been severely damaged and degraded. Very few of these areas remain in public ownership. Their attendant plant and wildlife resources fall under the jurisdiction of resource management agencies such as the BLM, the U.S. Fish and Wildlife Service, the Arizona Game and Fish Department and the Arizona State Land Department. All federal agencies are charged with the conservation of habitat for endangered species such as the bald eagle and peregrine falcon.

Public input has focused concern on the plight of this particular habitat. The Big Sandy, Santa Maria and Bill Williams rivers-Alamo Lake Complex supports one of the best populations of bald eagles in Arizona. This particular area could provide an important nucleus of bald eagles capable of recolonizing the Colorado River and the Grand Canyon. Proposed improvement of the riparian habitat through proper resource management would improve the habitat for this and other riparian-dependent species.

## Goals

To protect and enhance aquatic, riparian and threatened or endangered resources, emphasizing total ecosystem management.

## Objectives

1. Provide nesting habitat for the southern bald eagle by establishing native cottonwood trees. Promote natural regeneration of native cottonwood-willow habitat to replace existing dead and dying old-growth native trees. Increase the present density of native trees and reduce the density of exotic plants.
2. Prohibit human activities which may cause potentially adverse disturbances to nesting birds during the breeding season.
3. Obtain minimum instream flow to support aquatic and riparian habitat values.
4. Manage for optimum riparian habitat conditions and maintain or restore the creek to proper functioning condition.
5. Minimize adverse interactions between people and sensitive natural resources.
6. Minimize surface disturbance.
7. Resolve conflicts caused by incompatible activities on private and state lands which affect management of resources on neighboring public lands.
8. Enhance public awareness of aquatic, riparian and threatened or endangered values.

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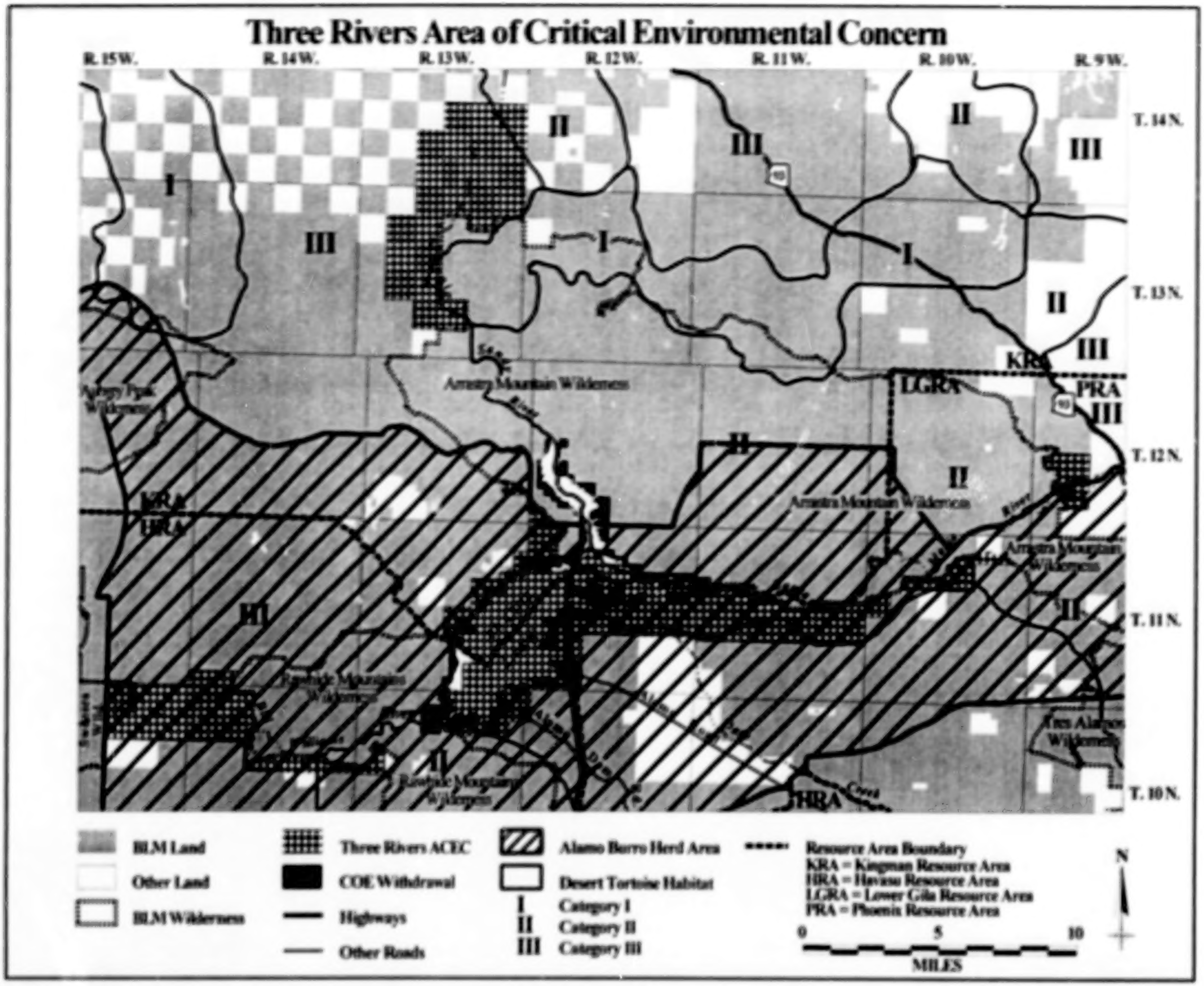 
Three Rivers Area of Critical Environmental Concern
R. 15W.
R. 14W.
R. 13W.
R. 12W.
R. 11W.
R. 10W.
R. 9W.
T. 14 N.
T. 13 N.
T. 12 N.
T. 11 N.
T. 10 N.
I
II
III
KRA
PRA
LGRA
HRA
Arrastra Mountain Wilderness
Aubrey Peak Wilderness
Rawhide Mountains Wilderness
Tres Alamos Wilderness
BLM Land
Other Land
BLM Wilderness
Three Rivers ACEC
COE Withdrawal
Highways
Other Roads
Alamo Burro Herd Area
Desert Tortoise Habitat
I Category I
II Category II
III Category III
Resource Area Boundary
KRA = Kingman Resource Area
HRA = Havasu Resource Area
LGRA = Lower Gila Resource Area
PRA = Phoenix Resource Area
0
5
10
MILES
N

# Management prescriptions

1. Propose designation of 32,043 acres of public lands as an area of critical environmental concern.

2. Limit off-highway vehicle use in riparian areas to designated roads and trails.

3. Withdraw 10,228 acres in the riparian zone from mineral entry, subject to valid existing rights.

4. Require mining plans of operation and mandatory bonding for all mineral exploration and development activities, other than casual use.

5. Allow mineral leasing in the riparian zone with no surface occupancy and in other areas, subject to appropriate stipulations designed to protect resource values.

6. Do not allow mineral material disposals in riparian zones.

7. Implement the decisions recommended in the Withdrawal and Classification section of Lands in the proposed action alternative of the *Kingman Resource Management Plan*.

8. Acquire 14,496 acres of private and 3,655 acres of state lands (surface and subsurface) and close to mineral entry.

9. Determine the need and file on water rights to obtain minimum instream flows to support aquatic and riparian habitat. Acquire data necessary to support and perfect instream flow water rights.

10. Do not allow removal of native vegetation, except for salvage.

11. Develop a systematic program for removal of salt cedar *(Tamarix gallica)*, focusing on primary drainage channels.

12. Restrict development of campgrounds to areas outside of riparian zones and the 100-year floodplain.

13. Confine new major rights-of-way to existing corridors.

14. Manage livestock, burro and big game grazing to achieve goals and objectives of the area of critical environmental concern. Develop desired plant community descriptions and incorporate these into allotment management plans and herd management area plans.

15. Continue to assist the bald eagle nest watch program.

16. Prohibit camping, hiking and off-highway vehicles within ¼-mile of a bald eagle nest during breeding season (January 1 to June 1).

17. Prohibit helicopter flights within ½-mile of active aeries during the breeding season (January 1 to June 1).

18. Prohibit road development within ½-mile of a bald eagle aerie.

19. Continue the riparian area condition evaluation inventory and monitoring.

20. Evaluate all other land use authorizations for compatibility with goals and objectives of the area of critical environmental concern.

21. Develop an area of critical environmental concern plan, incorporating existing plans affecting the area of critical environmental concern.

### Appendix E

# Socioeconomics

## Introduction

The planning area is near the middle and in the lower half of the state of Arizona. The affected area is expected to include all or portions of La Paz, Maricopa, Pima, Pinal, Yavapai and Yuma counties. The Phoenix and Tucson communities, with nearly 70 percent of the state's population, are slightly east of the management areas and have easy access. Other communities which may be affected include Buckeye, Casa Grande, Gila Bend, Marana, Oro Valley, Parker, Yuma, Wickenburg and Prescott. Interstate highways 17, 10 and 8, combined with state highways 60, 85, 87, 89 and 93, connect impacted communities and are major points of entry into and through the state.

## Population

County populations have grown between three and eight percent annually between 1970 and 1980 and between two and five percent between 1980 and 1990. Collectively, the counties grew a little more than five percent annually between 1970 and 1980 and slightly more than 3.5 percent annually between 1980 and 1990. The total city populations have generally followed the same growth pattern.

State projections indicated that individual counties would grow at an average annual rate of between 1.3 and 2.4 percent (about two percent collectively) between 1995 and the year 2020. Projections made for cities over the same timeframe were divided between the faster growing communities with an average annual projected growth rate of about 2.3 percent (see Table 5) and the second group which grew more slowly (about 0.8 percent annually).

The counties and cities in Table 5 were arranged in ascending order according to long-term growth rates. It should be noted that growth rates are projected to be highest in the near future and increase at a decreasing rate further into the future.

## Composition

Overall, the racial distribution in the study area resembles that of the state; however, the individual county statistics vary radically (see Table 6). The percentage of Native American populations in La Paz and Pinal counties exceeds the state percentage of 5.5 percent with 17.4 and 9.3 percent, respectively, while the other counties have considerably less than the state. The percentage of Hispanic populations in Yuma and Pinal counties with 40.6 and 29.3 percent, respectively, exceeds the state with 18.7 percent while Yavapai County has considerably less, 6.4 percent. Yavapai County's population is predominantly white, non-Hispanic with 89.3 percent as compared to 62.1 percent for the state. Yuma County has the lowest number of white, non-Hispanic with 34.9 percent.

In total, the age distribution for the six-county area resembles that for the state (see Table 7). Yuma and Pinal counties appear to have more younger people while Yavapai and La Paz counties appear to have more people in the retired group, age 64 and older. The percentage of individuals in the 20 to 65 age group or at the workforce age are lowest in La Paz, Yavapai and Yuma counties.

## Employment

The distribution of employment in the entire study area closely resembles that of Arizona; however, the study area also contains the two most populated counties in the state (see tables 8 and 9). Total employment includes both farm and nonfarm, including proprietorships by place of work. Within the study area, about 99 percent of employment is from nonfarm sectors; however, this varies between counties. In La Paz, Pinal and Yuma counties, between 5.7 and 11.8 percent of employment is from agriculture or agriculture-related business. In the remaining counties, this is less than 1.5 percent.

Over the past five years, farm proprietorships have decreased about one percent annually in all counties while total farm employment has remained relatively stable. Agricultural services have increased about three percent annually.

Of the nonfarm employment, the retail, services and government sectors were the most important employers in all the counties and in the state, although the individual ranking varied. They provided between 62 and 71 percent of the total nonfarm employment. State and local government was the main employer in all cases. Manufacturing was the fourth most important sector for three of the six counties, followed by the agricultural services sector for two counties and finance, insurance and real estate for the remaining county. The total for the retail, services and government -- state and local -- sectors of the study area all grew at rates exceeding two percent annually. Transportation and public utilities, wholesale trade and agricultural services all grew about three percent or more annually.

## Unemployment

Over the period 1987 to 1993, unemployment averaged about six percent for the state as compared to the study area, which averaged about 5.5 percent. Within the six counties, unemployment varied widely for the same period. Yuma, La Paz and Pinal counties averaged 21.7, 9.9 and 7.0 percent, respectively, while Yavapai, Maricopa and Pima counties averaged 5.5, 5.0 and 4.6 percent, respectively.

## Income

Total personal income includes: farm and nonfarm income; dividends, interest and rent; and transfer payments which have been adjusted for place of residence. Only Yuma and Pinal counties showed a negative adjustment regarding income flows to outside the county. Farm income totals 17.9 percent of the total personal income in La Paz County, 9.7 percent in Yuma County and 6.8 percent in Pinal County. The remaining counties have less than one percent of the total income attributable to agriculture (see Table 10).

Services, retail trade and government sectors were the top three providers of income in La Paz, Pima, Yavapai and Yuma counties. Manufacturing moved into the top three income-producing sectors in Maricopa County, while mining and manufacturing were in the top three in Pinal County.

Per capita income is a general indicator of economic well-being, considering total income and family size (see Table 11).

## Tax base

Table 12 summarizes the tax base for the study area. These six counties have most of the state's total cash value (more than 80 percent), primarily due to the fact that these counties also have a majority of the state's population. Cash value is synonymous with market value. Personal and real property are assigned a "legal" classification to determine assessed valuation for tax purposes (see Table 13).

## In-lieu payments

In lieu payments are designed to supplement other federal lands receipts that local governments may be receiving. They can be used for any governmental purpose (see Table 14).

Table 5. COMPARISON OF COUNTY AND CITY POPULATIONS – 1970 to 2020

| County | 1970 | % | 1980 | % | 1990 | % |
|---|---|---|---|---|---|---|
| Pinal | 68,579 | 3.3 | 90,918 | 2.8 | 116,379 | 2.1 |
| La Paz | 0 | 0 | 0 | 0 | 13,844 | 2.4 |
| Yuma | 60,827 | 4.9 | 90,554 | 1.8 | 106,895 | 2.6 |
| Pima | 351,667 | 5.1 | 531,443 | 2.6 | 666,880 | 2.5 |
| Maricopa | 971,228 | 5.5 | 1,509,262 | 4.1 | 2,122,101 | 2.6 |
| Yavapai | 37,008 | 8.4 | 68,145 | 5.8 | 107,714 | 3.0 |
| **SUBTOTAL** | 1,489,309 | 5.4 | 2,290,322 | 3.7 | 3,133,813 | 2.6 |
| **STATE TOTAL** | 1,775,399 | 5.3 | 2,718,424 | 3.5 | 3,665,228 | 2.6 |
| **Rapid Growth:** | | | | | | |
| Yuma | 29,007 | 4.9 | 43,063 | 2.8 | 54,923 | 2.1 |
| Prescott | 13,631 | 4.58 | 19,865 | 3.3 | 26,455 | 2.3 |
| Phoenix | 966,735 | 5.5 | 1,501,466 | 4.1 | 2,111,248 | 2.6 |
| Wickenburg | 2,698 | 3.1 | 3,535 | 2.78 | 4,515 | 9.6 |
| Oro Valley | 581 | 32.5 | 2,468 | 17.0 | 6,670 | 18.0 |
| Buckeye | 2,599 | 3.2 | 3,434 | 4.7 | 5,038 | 22.2 |
| Marana | 0 | | 1,674 | 3.1 | 2,187 | 23.0 |
| **SUBTOTAL** | 1,015,251 | 5.5 | 1,575,505 | 4.0 | 2,211,026 | 2.7 |
| **Slow Growth:** | | | | | | |
| Tucson | 262,933 | 2.89 | 338,636 | 2.0 | 405,390 | 1.5 |
| South Tucson | 6,220 | 0.5 | 6,554 | -2.2 | 5,093 | 2.2 |
| Gila Bend | 1,795 | -1.2 | 1,585 | 1.0 | 1,747 | 2.9 |
| Casa Grande | 10,536 | 4.2 | 14,971 | 2.8 | 19,082 | 1.6 |
| Parker | 1,948 | 3.1 | 2,542 | 1.4 | 2,897 | 1.1 |
| **SUBTOTAL** | 283,432 | 2.8 | 364,288 | 1.9 | 434,209 | 1.5 |
| **CITY TOTAL** | 1,298,683 | 4.9 | 1,939,793 | 3.6 | 2,645,235 | 2.5 |

Table 5. COMPARISON OF COUNTY AND CITY POPULATIONS – 1970 to 2020 (continued)

| County | 2000 | % | 2010 | % | 2020 | % |
|---|---|---|---|---|---|---|
| Pinal | 138,775 | 1.4 | 158,050 | 1.2 | 177,225 | 1.3 |
| La Paz | 16,675 | 1.4 | 19,125 | 1.4 | 21,700 | 1.4 |
| Yuma | 133,750 | 1.9 | 159,550 | 1.7 | 188,000 | 1.8 |
| Pima | 836,275 | 2.0 | 1,005,925 | 1.8 | 1,194,075 | 1.8 |
| Maricopa | 2,715,100 | 2.3 | 3,362,675 | 2.2 | 4,116,600 | 2.2 |
| Yavapai | 141,125 | 2.7 | 180,800 | 2.4 | 222,675 | 2.4 |
| **SUBTOTAL** | 3,981,700 | 2.2 | 4,886,125 | 2.0 | 5,920,275 | 2.1 |
| **STATE TOTAL** | 4,632,875 | 2.1 | 5,652,525 | 2.0 | 6,811,900 | 2.0 |
| **Rapid Growth:** | | | | | | |
| Yuma | 67,189 | 1.9 | 80,154 | 1.7 | 94,439 | 1.8 |
| Prescott | 32,636 | 2.1 | 39,975 | 4.4 | 47,724 | 2.0 |
| Phoenix | 2,699,821 | 2.3 | 3,343,350 | 2.1 | 4,090,908 | 2.2 |
| Wickenburg | 7,350 | 2.4 | 9,558 | 3.2 | 12,779 | 2.6 |
| Oro Valley | 19,680 | 5.5 | 30,560 | 3.9 | 43,100 | 5.0 |
| Buckeye | 11,472 | 1.2 | 13,380 | 18.2 | 37,727 | 5.2 |
| Marana | 14,753 | 19.6 | 46,103 | 6.6 | 76,578 | 11.8 |
| **SUBTOTAL** | 2,852,901 | 2.4 | 3,563,080 | 2.3 | 4,403,255 | 2.3 |
| **Slow Growth:** | | | | | | |
| Tucson | 455,703 | 0.8 | 491,057 | 0.3 | 520,034 | 0.7 |
| South Tucson | 6,014 | 1.2 | 6,782 | 0.9 | 7,500 | 1.1 |
| Gila Bend | 2,126 | 1.0 | 2,339 | 4.7 | 2,679 | 1.2 |
| Casa Grande | 22,250 | 1.4 | 25,343 | 1.2 | 28,416 | 1.3 |
| Parker | 3,279 | 1.4 | 3,758 | 1.4 | 4,264 | 1.4 |
| **SUBTOTAL** | 489,372 | 0.8 | 529,279 | 0.3 | 562,893 | 0.8 |
| **CITY TOTAL** | 3,342,273 | 2.2 | 4,092,359 | 2.0 | 4,966,148 | 1.7 |

**Table 6. 1990 CENSUS POPULATION COMPOSITION BY COUNTY IN PLANNING AREA AND STATE**

| *County* | *Black* | *Hispanic* | *Native American* | *Asian* | *Other* | *White non-Hispanic* | *Total* |
|---|---|---|---|---|---|---|---|
| La Paz | 118 | 3,139 | 2,402 | 102 | 887 | 7,196 | 13,844 |
| | 0.85% | 22.67% | 17.35% | 0.74% | 6.41% | 51.98% | 100.00% |
| Maricopa | 74,257 | 345,498 | 38,017 | 36,294 | 174,113 | 1,453,922 | 2,122,101 |
| | 3.50% | 16.28% | 1.79% | 1.71% | 8.20% | 68.51% | 100.00% |
| Pima | 20,795 | 163,262 | 20,330 | 11,964 | 88,815 | 361,714 | 666,880 |
| | 3.12% | 24.48% | 3.05% | 1.79% | 13.32% | 54.24% | 100.00% |
| Pinal | 3,648 | 34,062 | 10,785 | 502 | 14,225 | 53,157 | 116,379 |
| | 3.13% | 29.27% | 9.27% | 0.43% | 12.22% | 45.68% | 100.00% |
| Yavapai | 321 | 6,899 | 1,740 | 490 | 2,057 | 96,207 | 107,714 |
| | 0.30% | 6.40% | 1.62% | 0.45% | 1.91% | 89.32% | 100.00% |
| Yuma | 3,056 | 43,388 | 1,429 | 1,393 | 20,315 | 37,314 | 106,895 |
| | 2.86% | 40.59% | 1.34% | 1.30% | 19.00% | 34.91% | 100.00% |
| | | | | | | | |
| Planning area | 102,195 | 596,249 | 74,703 | 50,745 | 300,412 | 2,009,513 | 3,133,818 |
| | 3.26% | 19.03% | 2.38% | 1.62% | 9.59% | 64.12% | 100.00% |
| | | | | | | | |
| Arizona | 110,524 | 686,214 | 203,527 | 55,206 | 332,785 | 2,276,972 | 3,665,228 |
| | 3.02% | 18.72% | 5.55% | 1.51% | 9.08% | 62.12% | 100.00% |

Table 7. AGE DISTRIBUTION – 1990

| *County* | *0 to 19* | *20 to 64* | *65 and older* |
|---|---|---|---|
| La Paz | 28.8 | 52.09 | 19.11 |
| Maricopa | 29.13 | 58.30 | 12.50 |
| Pima | 28.39 | 57.89 | 13.72 |
| Pinal | 32.17 | 54.13 | 13.70 |
| Yavapai | 23.96 | 52.26 | 23.78 |
| Yuma | 32.72 | 53.39 | 13.89 |
| Study area | 29.03 | 57.70 | 13.27 |
| State | 29.84 | 57.04 | 13.89 |

### Table 8. COMPARISON OF EMPLOYMENT AND UNEMPLOYMENT RATES, BY COUNTY, TO THE PLANNING AREA AND STATE – 1987 to 1993

| *POLITICAL DIVISION* | *1993* | *1992* | *1991* | *1990* | *1989* | *1988* | *1987* |
|---|---|---|---|---|---|---|---|
| **LA PAZ** | | | | | | | |
| Labor force | 5,136 | 5,271 | 5,211 | 5,481 | 5,889 | 5,642 | 5,185 |
| Employment | 4,411 | 4,547 | 4,771 | 5,105 | 5,484 | 5,180 | 4,700 |
| Unemployment | 725 | 724 | 440 | 376 | 405 | 462 | 485 |
| Unemployment rate | 14.1% | 13.7% | 8.4% | 6.9% | 6.9% | 8.2% | 9.4% |
| **MARICOPA** | | | | | | | |
| Labor force | 1,120,120 | 1,108,722 | 1,098,175 | 1,122,340 | 1,062,451 | 1,031,475 | 1,001,104 |
| Employment | 1,063,098 | 1,038,213 | 1,044,607 | 1,073,463 | 1,017,028 | 978,837 | 949,032 |
| Unemployment | 57,022 | 70,509 | 53,568 | 48,877 | 45,423 | 52,538 | 52,072 |
| Unemployment rate | 5.1% | 6.4% | 4.9% | 4.4% | 4.3% | 5.1% | 5.2% |
| **PIMA** | | | | | | | |
| Labor force | 332,369 | 326,156 | 316,402 | 316,272 | 314,452 | 313,793 | 306,624 |
| Employment | 317,926 | 308,666 | 303,328 | 301,706 | 300,405 | 297,741 | 291,122 |
| Unemployment | 14,443 | 17,490 | 13,074 | 14,566 | 14,047 | 16,052 | 15,502 |
| Unemployment rate | 4.3% | 5.4% | 4.1% | 4.6% | 4.5% | 5.1% | 5.1% |
| **PINAL** | | | | | | | |
| Labor force | 45,458 | 45,366 | 44,583 | 45,800 | 39,891 | 37,408 | 37,581 |
| Employment | 42,481 | 41,486 | 41,657 | 42,920 | 37,116 | 33,912 | 33,413 |
| Unemployment | 2,977 | 3,880 | 2,926 | 2,880 | 2,775 | 3,495 | 4,168 |
| Unemployment rate | 6.5% | 8.6% | 6.6% | 6.3% | 7.0% | 9.3% | 11.1% |
| **YAVAPAI** | | | | | | | |
| Labor force | 52,533 | 49,881 | 46,536 | 45,248 | 38,917 | 36,060 | 35,165 |
| Employment | 49,555 | 46,376 | 44,202 | 43,181 | 36,903 | 33,772 | 33,017 |
| Unemployment | 2,978 | 3,506 | 2,334 | 2,067 | 2,014 | 2,288 | 2,148 |
| Unemployment rate | 5.7% | 7.0% | 5.0% | 4.6% | 5.2% | 6.3% | 6.1% |

### Table 8. COMPARISON OF EMPLOYMENT AND UNEMPLOYMENT RATES, BY COUNTY, TO THE PLANNING AREA AND STATE – 1987 to 1993 (continued)

| *POLITICAL DIVISION* | *1993* | *1992* | *1991* | *1990* | *1989* | *1988* | *1987* |
|---|---|---|---|---|---|---|---|
| **YUMA** | | | | | | | |
| Labor force | 53,763 | 52,864 | 48,515 | 47,398 | 53,779 | 52,824 | 47,534 |
| Employment | 41,006 | 38,945 | 38,677 | 37,487 | 44,653 | 42,572 | 39,365 |
| Unemployment | 12,757 | 13,919 | 9,838 | 9,911 | 9,126 | 10,252 | 8,169 |
| Unemployment rate | 23.7% | 26.3% | 20.3% | 20.9% | 17.0% | 19.4% | 17.2% |
| **PLANNING AREA** | | | | | | | |
| Labor force | 1,609,379 | 1,588,260 | 1,559,422 | 1,582,539 | 1,515,379 | 1,477,202 | 1,433,183 |
| Employment | 1,518,477 | 1,478,233 | 1,477,242 | 1,503,862 | 1,441,589 | 1,392,114 | 1,350,649 |
| Unemployment | 90,902 | 110,028 | 82,180 | 78,677 | 73,790 | 85,088 | 82,544 |
| Unemployment rate | 5.6% | 6.9% | 5.3% | 5.0% | 4.9% | 5.8% | 5.8% |
| **ARIZONA** | | | | | | | |
| Labor force | 1,837,003 | 1,812,003 | 1,774,001 | 1,798,002 | 1,705,502 | 1,660,000 | 1,614,000 |
| Employment | 1,723,002 | 1,677,002 | 1,674,000 | 1,702,001 | 1,616,501 | 1,555,999 | 1,513,000 |
| Unemployment | 114,000 | 135,002 | 100,001 | 96,001 | 89,001 | 104,001 | 101,000 |
| Unemployment rate | 6.2% | 7.5% | 5.6% | 5.3% | 5.2% | 6.3% | 6.3% |
| LA PAZ | -8.47% | -6.81% | -3.17% | -1.89% | -2.01% | -2.43% | -3.59% |
| MARICOPA | 0.56% | -0.71% | 0.77% | 1.29% | 1.37% | 0.55% | 0.45% |
| PIMA | 1.30% | 0.29% | 1.52% | 1.04% | 1.18% | 0.53% | 0.59% |
| PINAL | -0.90% | -2.90% | -0.91% | -0.64% | -1.31% | -3.70% | -5.44% |
| YAVAPAI | -0.02% | -1.38% | 0.63% | 1.08% | 0.47% | 0.70% | -0.48% |
| YUMA | -18.0% | -20.68% | -14.63% | -15.26% | -11.32% | -13.76% | -11.54% |
| ARIZONA | -0.56% | -0.57% | -0.35% | -0.36% | -0.35% | -0.51% | -0.50% |

Table 9. COMPARISON OF 1992 EMPLOYMENT SECTORS BY COUNTY

| | *La Paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *Arizona* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total employment | 5,820 | 100 | 1,253,375 | 100 | 334,470 | 100 | 43,271 | 100 | 47,893 | 100 | 55,520 | 100 | 1,740,349 | 100 | 1,960,277 | 100 |
| Wage, salary | 4,482 | 77 | 1,055,893 | 84 | 277,384 | 83 | 36,241 | 84 | 33,776 | 71 | 48,853 | 88 | 1,456,629 | 84 | 1,636,254 | 83 |
| Proprietors | 1,338 | 23 | 197,482 | 16 | 57,086 | 17 | 7,030 | 16 | 14,117 | 29 | 5,667 | 12 | 283,720 | 16 | 324,023 | 17 |
| Farm | 127 | 2 | 2,663 | 0 | 540 | 0 | 855 | 2 | 518 | 1 | 682 | 1 | 5,385 | 0 | 8,492 | 0 |
| Non-farm | 1,211 | 21 | 194,819 | 16 | 56,546 | 17 | 6,175 | 14 | 13,599 | 28 | 5,985 | 11 | 278,335 | 16 | 315,531 | 16 |
| Farm | 689 | 12 | 8,068 | 1 | 1,244 | 0 | 2,460 | 6 | 622 | 1 | 4,701 | 8 | 17,784 | 1 | 21,956 | 1 |
| Non-farm | 5,131 | 88 | 1,245,307 | 99 | 333,226 | 100 | 40,811 | 94 | 47,271 | 98 | 50,819 | 92 | 1,722,565 | 99 | 1,938,321 | 99 |
| Private | 4,156 | 71 | 1,085,019 | 67 | 271,955 | 81 | 29,137 | 67 | 40,306 | 84 | 37,927 | 68 | 1,468,500 | 84 | 1,630,554 | 83 |
| Agricultural services, forestry, fisheries, others | 395 | 7 | 14,675 | 1 | 3,352 | 1 | 1,085 | 3 | 565 | 1 | 8,359 | 15 | 28,431 | 2 | 30,395 | 2 |

Table 9. COMPARISON OF 1992 EMPLOYMENT SECTORS BY COUNTY (continued)

| | *La Paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *Arizona* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mining | 120 | 2 | 2,496 | 0 | 2,842 | 1 | 3,916 | 9 | 1,126 | 2 | 70 | 0 | 10,570 | 1 | 15,540 | 1 |
| Construction | 301 | 5 | 67,996 | 5 | 18,002 | 5 | 1,298 | 3 | 3,900 | 8 | 1,911 | 3 | 93,408 | 5 | 105,302 | 5 |
| Manufacturing | 244 | 4 | 133,093 | 11 | 25,441 | 8 | 4,167 | 10 | 3,129 | 7 | 1,755 | 3 | 167,829 | 10 | 180,704 | 9 |
| Transportation, public utilities | 227 | 4 | 58,848 | 5 | 11,827 | 4 | 1,346 | 3 | 1,613 | 3 | 1,863 | 3 | 75,724 | 4 | 85,536 | 4 |
| Wholesale trade | 97 | 2 | 66,635 | 5 | 9,722 | 3 | 950 | 2 | 1,073 | 2 | 2,633 | 5 | 81,110 | 5 | 86,485 | 4 |
| Retail trade | 1,394 | 24 | 219,215 | 17 | 63,485 | 19 | 6,351 | 15 | 10,921 | 22 | 8,703 | 16 | 310,069 | 18 | 355,257 | 18 |
| Finance, insurance, real estate | 274 | 5 | 129,703 | 10 | 25,256 | 8 | 1,632 | 4 | 3,912 | 8 | 2,518 | 5 | 163,293 | 9 | 173,999 | 9 |

**Table 9. COMPARISON OF 1992 EMPLOYMENT SECTORS BY COUNTY (continued)**

| | *La Paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *Arizona* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Services | 1,104 | 19 | 392,358 | 31 | 112,028 | 33 | 8,392 | 19 | 14,067 | 29 | 10,117 | 18 | 538,066 | 31 | 597,336 | 30 |
| Government, government enterprises | 975 | 17 | 160,288 | 13 | 61,271 | 18 | 11,674 | 27 | 6,965 | 15 | 12,892 | 23 | 254,065 | 15 | 307,767 | 16 |
| Federal, civilian | 165 | 3 | 18,850 | 2 | 8,295 | 2 | 776 | 2 | 1,185 | 2 | 2,530 | 5 | 31,801 | 2 | 45,534 | 2 |
| Military | 60 | 1 | 14,214 | 1 | 7,260 | 2 | 439 | 1 | 423 | 1 | 4,742 | 9 | 27,138 | 2 | 35,040 | 2 |
| State, local | 750 | 13 | 127,224 | 10 | 45,716 | 14 | 10,459 | 24 | 5,357 | 11 | 5,620 | 10 | 195,126 | 11 | 227,193 | 12 |

Table 10. COMPARISON OF 1992 INCOME SECTORS BY COUNTY (in thousands of dollars)

| | *La paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *State* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total personal income | 233 | 100 | 42,793 | 100 | 11,493 | 100 | 1,526 | 100 | 1,785 | 100 | 1,569 | 100 | 59,398 | 100 | 66,687 | 100 |
| Non-farm personal income | 191 | 82 | 42,570 | 99 | 11,460 | 98 | 1,422 | 93 | 1,773 | 99 | 1,416 | 90 | 58,833 | 99 | 66,019 | 99 |
| Farm income | 42 | 18 | 224 | 1 | 33 | 0 | 104 | 7 | 11 | 1 | 152 | 10 | 565 | 1 | 668 | 1 |
| Population (in thousands) | 13.7 | | 2,209.6 | | 690.2 | | 120.8 | | 116.1 | | 117.5 | | 3,267.9 | | 3,832.4 | |
| Per capita personal income (dollars) | 17 | | 19 | | 17 | | 13 | | 15 | | 13 | | 18 | | 17 | |
| Earnings by place of work | 133 | 57 | 30,929 | 72 | 7,187 | 63 | 1,025 | 67 | 827 | 46 | 1,152 | 73 | 41,253 | 69 | 45,882 | 69 |

| Table 10. COMPARISON OF 1992 INCOME SECTORS BY COUNTY (in thousands of dollars) (continued) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***La paz*** | **%** | ***Maricopa*** | **%** | ***Pima*** | **%** | ***Pinal*** | **%** | ***Yavapai*** | **%** | ***Yuma*** | **%** | ***Total*** | **%** | ***State*** | **%** |
| Less: Personal cont. for social insur. | 5 | 2 | 1,953 | 5 | 448 | 4 | 56 | 4 | 58 | 3 | 62 | 4 | 2,580 | 4 | 2,856 | 4 |
| Plus: Adjustment for residence | 28 | 12 | 30 | 0 | 118 | 1 | -52 | -3 | 84 | 5 | -40 | -3 | 168 | 0 | 246 | 0 |
| Equals: Net earnings by place of residence | 156 | 67 | 29,006 | 68 | 6,858 | 60 | 917 | 60 | 853 | 48 | 1,050 | 67 | 38,841 | 65 | 43,272 | 65 |
| Plus: Dividends, interest and rent | 24 | 10 | 7,173 | 17 | 2,294 | 20 | 177 | 12 | 490 | 27 | 171 | 11 | 10,329 | 17 | 11,284 | 17 |
| Plus: Transfer payments | 53 | 23 | 6,614 | 16 | 2,340 | 20 | 432 | 28 | 441 | 25 | 347 | 22 | 10,228 | 17 | 12,131 | 18 |

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**Table 10. COMPARISON OF 1992 INCOME SECTORS BY COUNTY (in thousands of dollars) (continued)**

| | *La paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *State* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wages and salaries | 76 | 33 | 25,734 | 60 | 5,972 | 52 | 786 | 52 | 603 | 34 | 880 | 56 | 34,052 | 57 | 37,728 | 57 |
| Other labor income | 8 | 3 | 2,630 | 6 | 575 | 5 | 94 | 6 | 63 | 4 | 74 | 5 | 3,444 | 6 | 3,813 | 6 |
| Proprietors' income | 49 | 21 | 2,565 | 6 | 640 | 6 | 144 | 9 | 161 | 9 | 198 | 13 | 3,757 | 6 | 4,342 | 7 |
| Farm | 32 | 14 | 139 | 0 | 22 | 0 | 80 | 5 | 10 | 1 | 96 | 6 | 379 | 1 | 469 | 1 |
| Non-farm | 17 | 7 | 2,426 | 6 | 618 | 5 | 64 | 4 | 151 | 8 | 102 | 6 | 3,378 | 6 | 3,873 | 6 |
| Farm | 42 | 18 | 224 | 1 | 33 | 0 | 104 | 7 | 11 | 1 | 152 | 10 | 565 | 1 | 668 | 1 |
| Non-farm | 91 | 39 | 30,706 | 72 | 7,155 | 62 | 921 | 60 | 816 | 46 | 1,000 | 64 | 40,688 | 69 | 45,214 | 68 |
| Private | 66 | 28 | 26,312 | 61 | 5,496 | 48 | 650 | 43 | 646 | 36 | 672 | 43 | 33,841 | 57 | 36,860 | 55 |
| Agricultural services, forestry, fishing, others | 5 | 2 | 198 | 0 | 46 | 0 | 15 | 1 | 7 | 0 | 106 | 68 | 378 | 1 | 396 | 1 |

**Table 10. COMPARISON OF 1992 INCOME SECTORS BY COUNTY (in thousands of dollars) (continued)**

| | *La paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *State* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mining | 4 | 2 | 67 | 0 | 122 | 1 | 172 | 11 | 42 | 2 | 1 | 0 | 407 | 1 | 632 | 1 |
| Construction | 7 | 3 | 1,784 | 4 | 434 | 4 | 26 | 2 | 83 | 5 | 51 | 3 | 2,385 | 4 | 2,654 | 4 |
| Manufacturing | 6 | 3 | 5,048 | 12 | 863 | 8 | 135 | 9 | 74 | 4 | 41 | 3 | 6,168 | 10 | 6,526 | 10 |
| Transportation and public utilities | 4 | 1 | 1,974 | 5 | 364 | 3 | 40 | 3 | 40 | 2 | 52 | 3 | 2,473 | 4 | 2,789 | 4 |
| Wholesale trade | 2 | 1 | 2,185 | 5 | 252 | 2 | 27 | 2 | 21 | 1 | 57 | 4 | 2,543 | 4 | 2,675 | 4 |
| Retail trade | 19 | 8 | 3,345 | 8 | 882 | 8 | 89 | 6 | 136 | 8 | 122 | 8 | 4,592 | 8 | 5,178 | 8 |
| Finance, insurance, real estate | 2 | 1 | 2,670 | 6 | 320 | 3 | 14 | 1 | 27 | 2 | 28 | 2 | 3,062 | 5 | 3,169 | 5 |

**Table 10. COMPARISON OF 1992 INCOME SECTORS BY COUNTY (in thousands of dollars) (continued)**

| | *La paz* | % | *Maricopa* | % | *Pima* | % | *Pinal* | % | *Yavapai* | % | *Yuma* | % | *Total* | % | *State* | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Services | 17 | 7 | 9,040 | 21 | 2,214 | 19 | 132 | 9 | 217 | 12 | 214 | 14 | 11,834 | 20 | 12,840 | 19 |
| Government, government enterprises | 25 | 11 | 4,394 | 10 | 1,659 | 14 | 271 | 18 | 170 | 10 | 328 | 21 | 6,847 | 12 | 8,354 | 13 |
| Federal, civilian | 5 | 231 | 723 | 2 | 305 | 3 | 25 | 2 | 41 | 2 | 86 | 5 | 1,186 | 2 | 1,663 | 2 |
| Military | .4 | 0 | 242 | 1 | 157 | 1 | 3 | 0 | 3 | 0 | 107 | 7 | 513 | 1 | 706 | 1 |
| State, local | 19 | 8 | 3,429 | 8 | 1,197 | 10 | 243 | 16 | 126 | 7 | 135 | 9 | 5,148 | 9 | 5,985 | 9 |

**Table 11. PER CAPITA INCOME INCREASE BY COUNTY -- 1988 to 1992**

| *County* | *1988* | *1992* | *Rank* | *Percent of change* |
|---|---|---|---|---|
| La Paz | $12,127 | $17,065 | 2 | 40.7 |
| Maricopa | $16,815 | $19,367 | 1 | 15.2 |
| Pima | $14,387 | $16,651 | 3 | 15.7 |
| Pinal | $11,387 | $12,634 | 6 | 11.0 |
| Yavapai | $13,089 | $15,376 | 4 | 17.5 |
| Yuma | $12,664 | $13,345 | 5 | 5.4 |

**Table 12. TAX BASE**

| *County* | *Total cash value* | *Net assessed value* | *Average rates per $100* | | *Total revenue* |
|---|---|---|---|---|---|
| | | | *Primary* | *Secondary* | |
| La Paz | 1,321,177,985 | 99,815,817 | 9.54 | 2.70 | 11,956,497 |
| Maricopa | 95,670,358,361 | 13,503,570,335 | 8.69 | 3.49 | 1,626,671,027 |
| Pima | 27,379,317,182 | 2,974,071,684 | 11.13 | 4.74 | 486,350,280 |
| Pinal | 3,684,263,485 | 578,334,264 | 12.13 | 2.95 | 86,320,830 |
| Yavapai | 5,332,284,928 | 744,899,984 | 9.23 | 3.00 | 88,950,924 |
| Yuma | 3,154,751,426 | 399,437,331 | 10.53 | 3.12 | 53,842,395 |

**Table 13. LEGAL CLASSIFICATION TO DETERMINE ASSESSED VALUATION FOR TAX PURPOSES**

| *Legal class* | *Percentage assessed* | *Type of property* |
|---|---|---|
| Class 1 | 30 | Mines, mining property and timber |
| Class 2 | 30 | Telecommunications and utilities |
| Class 3 | 25 | Commercial and industrial |
| Class 4 | 16 | Agricultural and vacant land |
| Class 5 | 10 | Residential property owner |
| Class 6 | 11 | Rented residential |
| Class 7 | 24 | Railroad operating |
| Class 8 | 5 | Historic property |
| Class 11 | 8 | Livestock |
| Class C | 100 | Producing oil and gas |

**Table 14. IN-LIEU PAYMENTS BY COUNTY – FISCAL YEAR 1994**

| *County* | *Entitlement acres* | *Percent of total acres* | *Total acres* | *In lieu payment* | *Payment/ acres* |
|---|---|---|---|---|---|
| La Paz | 1,849,719 | 64.6 | 2,889,000 | 434,000 | .23 |
| Maricopa | 2,312,025 | 39.58 | 5,904,000 | 999,000 | .43 |
| Pima | 1,523,588 | 25.91 | 5,880,000 | 962,438 | .63 |
| Pinal | 516,338 | 15.1 | 3,439,000 | 359,744 | .70 |
| Yavapai | 422,028 | 8.1 | 5,201,000 | 316,511 | .75 |
| Yuma | 1,516,060 | 43.0 | 3,531,000 | 999,914 | .66 |
| AREA TOTAL | 8,139,758 | 30.4 | 26,844,000 | | |
| STATE | 27,539,895 | 37.9 | 72,645,000 | | |

**Table 15. BREAKDOWN OF ESTABLISHMENTS AND RECEIPTS FOR SECTORS BY COUNTY**

| *County* | *Establishments* | *Receipts (in thousands of dollars)* |
|---|---:|---:|
| La Paz | 157 | 88,950 |
| Maricopa | 31,801 | 38,645,429 |
| Pima | 9,289 | 7,423,481 |
| Pinal | 947 | 673,933 |
| Yavapai | 1,582 | 649,339 |
| Yuma | 1,214 | 1,030,163 |

According to the Census of Retail, Wholesale and Services, the study area had about 44,990 establishments with sales of $48,611,295,000. Receipts were divided among retail, wholesale and services, with 40, 40 and 20 percent respectively. Table 14 is a breakdown of establishments and receipts for these sectors by county.

Appendix F

# U.S. Fish and Wildlife Service documentation

United States Department of the Interior
Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 W. Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
(602) 640-2720 Fax (602) 640-2730

In Reply Refer To:

AESO/SE
2-21-95-I-269

May 30, 1997

MEMORANDUM

TO: Field Manager, Phoenix Field Office, Bureau of Land Management, Phoenix, Arizona

FROM: Field Supervisor

SUBJECT: Request for Concurrence on the Lower Gila Resource Area Amendment

This memorandum is in response to your request for concurrence pursuant to section 7 of the Endangered Species Act on the proposed Lower Gila Resource Area Amendment. The Lower Gila Resource Area encompasses approximately 2 million acres of public lands, an additional 1.1 million acres on the Barry M. Goldwater Air Force Range, and borders the Santa Maria River to the north, west to the Eagletail Mountains, the Mexico border in the south, and the eastern boundary of the Papago Indian Reservation of the Tohono O'odham Nation.

The proposed amendments are to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan and include land tenure adjustments, desert tortoise habitat management, desert bighorn sheep augmentation and reestablishment, wild horse and burro management, recreation management, and oil and gas leasing. The Bureau of Land Management has determined that the above proposed amendment described in the April 9, 1996, (printed December 10, 1996), draft final environmental assessment and accompanying biological evaluation, may affect, but is not likely to adversely affect Sonoran pronghorn (*Antilocapra americana sonoriensis*), lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*), Gila topminnow (*Poeciliopsis occidentalis*), desert pupfish (*Cyprinodon macularius*), Yuma clapper rail (*Rallus longirostris yumanensis*), peregrine falcon (*Falco peregrinus*), brown pelican (*Pelecanus occidentalis*), Bald eagle (*Haliaeetus leucocephalus*), and cactus ferruginous pygmy owl (*Glaucidium brasilianum cactorum*). The BLM has determined that the proposed amendment may affect, and is likely to adversely affect the southwestern willow flycatcher (*Empidonax traillii extimus*). The BLM has entered into formal consultation with the Service for the southwestern willow flycatcher. A biological opinion from the Service will be issued at a later date.

All activities implemented under the amendment will be reviewed on a case by case basis and the BLM will comply with all section 7 consultation responsibilities. For land tenure adjustments, the policy established in this plan amendment is to not dispose of lands occupied by listed or proposed threatened or endangered species. If other public uses outweigh the value of a parcel as Federally-owned threatened or endangered species habitat, disposal could be considered on a case-by-case basis. If a listed or proposed threatened or endangered species may be affected by a land disposal action, consultation or conferencing with the Service will be required. Exchange for other parcels of habitat would be encouraged. Compensation for loss of habitat value would be required where a compensation policy exists. Other mitigation may also be required.

Off-highway and special recreation vehicles will be limited to existing and/or designated roads, trails, and vehicle routes. All designations will be evaluated to protect natural resources. Recreational facility areas (i.e. campgrounds) will be in located in a manner that is not likely to adversely affect threatened or endangered species and their habitats. Any fencing efforts will avoid or minimize impacts to saguaros, agaves, and other components of listed or proposed species habitat. Species surveys and seasonal restrictions on construction will be used to ensure that activities are not likely to adversely affect listed or proposed species. Oil and gas leases will be subject to standard terms and conditions and will come with a no surface occupancy clause when necessary, to ensure activities are not likely to adversely affect listed or proposed species.

The Service concurs with the BLM's finding that the amendment is not likely to adversely affect the listed species above. If there are any questions or if any further assistance is needed please contact Lorena Wada or Ted Cordery.

Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (GM:AZ)(AES)
Director, Arizona Game and Fish Department, Phoenix, AZ

United States Department of the Interior
Fish and Wildlife Service
Arizona Ecological Services Field Office
2321 W. Royal Palm Road, Suite 103
Phoenix, Arizona 85021-4951
(602) 640-2720 Fax (602) 640-2730

In Reply Refer To:
AESO/ES
2-21-95-F-269

October 2, 1997

MEMORANDUM

TO: District Manager, Phoenix District Office, Bureau of Land Management, Arizona

FROM: Field Supervisor

SUBJECT: Biological Opinion for the Lower Gila Resource Area Amendment

The U.S. Fish and Wildlife Service (Service) has reviewed the draft Proposed Lower Gila Resource Area Amendment and Final Environmental Assessment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan, and the accompanying biological evaluation and clarification. The Bureau of Land Management's (BLM) August 29, 1995, request for formal consultation was received on August 30, 1995. This document represents the Service's biological opinion on the effects of that action on the southwestern willow flycatcher (*Empidonax traillii extimus*) in accordance with section 7 of the Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.).

This biological opinion is based on information provided in the April 9, 1996 (printed December 10, 1996), draft final environmental assessment (DFEA), the accompanying biological evaluation and clarification(BE&C), field investigations, and other sources of information. Literature cited in this biological opinion is not a complete bibliography of all literature available on the species of concern, land tenure, recreation, burro management, fencing maintenance, and oil and gas activities and its effects, or on other subjects considered in this opinion. A complete administrative record of this consultation is on file in this office.

It is the Service's opinion that the proposed Lower Gila Resource Area Amendment plan is not likely to jeopardize the continued existence of the southwestern willow flycatcher.

## CONSULTATION HISTORY

The formal consultation process began with the BLM's August 29,1995, request for consultation. On May 2, 1997, the Service received an updated environmental assessment and clarification of the biological evaluation. In a memorandum dated May 30,1997, the Service concurred with the BLM's determinations of the effect the proposed amendment plan may have on other listed species.

## BIOLOGICAL OPINION

### DESCRIPTION OF PROPOSED ACTION

The proposed amendments are to the Lower Gila North Management Framework Plan and Lower Gila South Resource Management Plan. The amendments are grouped under the following headings: land tenure adjustments, desert tortoise habitat management, desert bighorn sheep augmentation and reestablishment, wild horse and burro management, recreation management, and oil and gas development.

Proposed land tenure adjustments include identification of 34,100 acres available for disposal, with approximately 12,000 acres adjacent to White Tanks Regional Park available for disposal for recreation/parks, and approximately 4,000 acres south of Buckeye available for disposal for community services and public facilities. These areas in the Gila Bend Management Area are available only to local, county and state government. Exchanges to reposition lands within each management area will be allowed. All public land within the five management areas will be retained unless needed for recreation and public purposes. Any disposals will be considered on a case by case basis and comply with all National Environmental Policy Act (NEPA) and Endangered Species Act (Act) regulations. The proposed amendments will also allow for the acquisitions of nonfederal lands from willing sellers/buyers considered to be of high resource values within the five management areas. The policy established in this plan amendment is to not dispose of lands occupied by listed or proposed threatened or endangered species

The proposed amendment will also formally adopt the Strategy for Desert Tortoise Habitat Management On Public Lands in Arizona. Various other amendments proposed for the benefit of desert tortoise include, but are not limited to, formally adopting the categories of desert tortoise habitat, maintain a record of environmental assessments containing tortoise stipulations, comply with the Act and BLM policy, establish management areas to protect corridors, facilitate management and provide units for ecosystem management, and address and include mitigation measures in decision documents to offset loss of quality or quantity of tortoise habitat.

Proposed amendments regarding desert bighorn sheep augmentation and reestablishment include identifying all mountain ranges as current or historic habitat and allow augmentation or reestablishment where conflicts with other uses or resources do not occur or can be resolved.

Burro management amendments include managing burros in designated herd areas as free-roaming, self-sustaining populations that thrive in a natural, ecologically balanced system and removal of burros that exceed the balance. The Harquahala, Little Harquahala and Painted Rock herd areas will be established as herd management areas. Monitoring will determine a thriving natural ecological balance. Collaboration will occur with the Air Force, Tohono O'odham Nation and the Bureau of Indian Affairs to maintain the boundary fence between the Barry M. Goldwater Range and the Tohono O'odham Nation's reservation to restrict movement of privately owned burros onto public land. Other activities such as designating a burro viewing route and posting of interpretive signs are proposed as well. Efforts will be made to avoid or minimize impacts to saguaros, agaves, and other components of listed or proposed species habitat. Species surveys and seasonal restrictions on construction will be used to ensure that activities are not likely to adversely affect listed or proposed species.

Recreation management amendments include designating all public lands within the resource area as "limited" except the Vekol Valley grassland and the Coffeepot Botanical areas of critical concern which will be designated "limited to designated routes only" with respect to off-highway and special recreation vehicle use. All off-highway vehicle use will be limited to existing and/or designated roads and traditionally or historically used vehicle routes. Long-term visitor areas, short-term camping areas, and up to six extended camping areas will be considered on a case by case basis. All designations will be evaluated to protect natural resources, and recreational facilities (i.e. campgrounds) will be located in a manner that is not likely to adversely affect threatened or endangered species and their habitats.

Oil and gas development amendments include issuing leases subject to the standard terms and conditions, with no more than ten wells being drilled within the resource area. Leases will come with a no surface occupancy clause when necessary, to ensure activities are not likely to adversely affect listed or proposed species.

A more in depth description of amendments are included in the DFEA and accompanying BE&C.

## STATUS OF THE SPECIES

The southwestern willow flycatcher is a small passerine bird (Order Passeriformes; Family Tyrannidae) measuring approximately 15 centimeters (5.75 in.) in length from the tip of the bill to the tip of the tail and weighing only 11 grams (0.4 ounces). It has a grayish-green back and wings, whitish throat, light gray-olive breast, and pale yellowish belly. Two white wingbars are visible (juveniles have buffy wingbars). The eye ring is faint or absent. The upper mandible is dark, the lower is light yellow grading to black at the tip.

The southwestern willow flycatcher is an insectivore typically perching on a branch and making short direct flights, or sallying, to capture flying insects. The southwestern willow flycatcher is a riparian obligate, nesting along rivers, streams, and other wetlands where dense growths of willow (*Salix* sp.), *Baccharis*, buttonbush (*Cephalanthus* sp.), boxelder (*Acer negundo*), saltcedar (*Tamarix* sp.) or other plants are present, often with a scattered overstory of cottonwood (*Populus* sp.) and/or willow.

One of four currently-recognized willow flycatcher subspecies (Phillips 1948, Unitt 1987, Browning 1993), the southwestern willow flycatcher is a neotropical migratory species that breeds in the southwestern U.S. and migrates to Mexico, Central America, and possibly northern South America during the non-breeding season (Phillips 1948, Stiles and Skutch 1989, Peterson 1990, Ridgely and Tudor 1994, Howell and Webb 1995). The historical range of the southwestern willow flycatcher included southern California, Arizona, New Mexico, western

Texas, southwestern Colorado, southern Utah, extreme southern Nevada, and extreme northwestern Mexico (Sonora and Baja)(Unitt 1987).

The States of California and New Mexico list the southwestern willow flycatcher as endangered (California Department of Fish and Game 1992, and New Mexico Department of Game and Fish 1988). The state of Arizona considers the southwestern willow flycatcher a species of special concern (AGFD 1996). The Service included the southwestern willow flycatcher on its Animal Notice of Review as a category 2 candidate species on January 6, 1989 (USFWS 1989). A proposal to list the southwestern willow flycatcher as endangered, with critical habitat, was published on July 23, 1993 (USFWS 1993), and a final rule without critical habitat was published on February 27, 1995 (USFWS 1995), becoming effective on March 29, 1995. Following the review of comments received during the public comment period, the Service deferred the designation of critical habitat, invoking an extension on this decision until July 23, 1995. A moratorium on listing actions under the Act passed by Congress in April 1995 required the Service to cease work on the designation of critical habitat. On April 26, 1996, the moratorium was lifted and on May 16, 1996, the Service published a notice int he Federal Register announcing listing prioritization guidance. Listing actions were placed in categories of decreasing order of priority: Tier 1 - Emergency listings; Tier 2 - Finalization of listing decisions on proposed species; and Tier 3 - all other listing actions (proposed rules, petition findings, critical habitat designations). On May 13, 1997, the Southwest Center for Biological Diversity filed a lawsuit claiming that the Service violated the Act by not finalizing critical habitat for the southwestern willow flycatcher. On March 20, 1997, the District Court ordered the Service to finalize critical habitat for the flycatcher by July 18, 1997. The Department of Justice has filed an appeal and a stay pending appeal of the Court's decision. The Service is currently waiting for the Appeals Court's ruling.

## Life History

The southwestern willow flycatcher forages within and above dense riparian vegetation, taking insects on the wing or gleaning them from foliage (Wheelock 1912, Bent 1960). No information is available on specific prey species. However, fecal samples containing identifiable invertebrate body parts were collected during banding operations from more than 70 southwestern willow flycatchers in California, Arizona, and southwestern Colorado (M. Sogge, pers. comm.). These samples could yield important data on prey use at various locations and timing throughout the breeding season.

The southwestern willow flycatcher begins arriving on breeding grounds in late April and May (Sogge and Tibbitts 1992, Sogge *et al.* 1993, Sogge and Tibbitts 1994, Muiznieks *et al.* 1994, Maynard 1995, Sferra *et al.* 1995). Migration routes are not completely known. However, willow flycatchers have been documented migrating through specific locations and drainages in Arizona that do not currently support breeding populations, including the upper San Pedro River (BLM, unpubl. data), Colorado River through Grand Canyon National Park (Sogge and Tibbitts 1992, Sogge *et al.* 1993, Sogge and Tibbitts 1994), lower Colorado River (Muiznieks *et al.* 1994, Spencer *et al.* 1996), Verde River tributaries (Muiznieks *et al.* 1994), and Cienega Creek

(BLM, *in litt.*). These observations probably include subspecies *E.t. brewsteri* and *E.t. adastus*. *Empidonax* flycatchers rarely sing during fall migration, so that a means of distinguishing some migrating *Empidonax* without a specimen is not feasible (Blake 1953, Peterson and Chalif 1973). However, willow flycatchers have been reported to sing and defend winter territories in Mexico and Central America (Gorski 1969, McCabe 1991).

Nesting begins in late May and early June and young fledge from late June through mid-August (Willard 1912, Ligon 1961, Brown 1988, Whitfield 1990, Sogge and Tibbitts 1992, Sogge *et al.* 1993, Muiznieks *et al.* 1994, Whitfield 1994, Maynard 1995). Southwestern willow flycatchers typically lay three to four eggs in a clutch (range = 2-5). The breeding cycle, from laying of the first egg to fledging, is approximately 28 days. Eggs are laid at one-day intervals (Bent 1960, Walkinshaw 1966, McCabe 1991); they are incubated by the female for approximately 12 days; and young fledge approximately 12 to 13 days after hatching (King 1955, Harrison 1979). Southwestern willow flycatchers typically raise one brood per year but have been documented raising two broods during one season (Whitfield 1990). They have also been documented renesting after nest failure (Whitfield 1990, Sogge and Tibbitts 1992, Sogge *et al.* 1993, Sogge and Tibbitts 1994, Muiznieks *et al.* 1994, Whitfield 1994, Whitfield and Strong 1995).

Whitfield, who has accumulated the largest data set on southwestern willow flycatchers, reported the following data on survivorship of adults and young: of 58 nestlings banded since 1993, 21 (36%) returned to breed; of 57 birds banded as adults (after hatch year) since 1989, 18 (31%) returned to breed at least one year (10 males, 8 females), five (9%) returned to breed for two years (all males), and two (3.5%) returned to breed for three years (M. Whitfield, Kern River Preserve, pers. comm.) Whitfield (1995) also documented statistically significant variation in return rates of juveniles as a function of fledging date; approximately 21.9% of juveniles fledged on or before July 20th returned to her study area the following year, whereas only 6.4% of juveniles fledged after July 20th returned the following year.

Walkinshaw (1966), who studied *E.t. traillii* in Michigan, estimated that 40.9% of the males at his study site returned to breed for at least two years, 22.7% returned for at least three years, 13.6% returned for at least four years, and at least 4.5% returned during their fifth year. Female return rates were substantially lower. Only 22.6% returned to breed for one year. Whitfield and Walkinshaw do not incorporate potential emigration rates into their estimates of returns and, thus, may underestimate actual survivorship. However, these data are consistent with survival rates for other passerines (Gill 1990, chap. 21) suggesting that the lifespan of most southwestern willow flycatchers is probably two to three years (i.e. most flycatchers survive to breed one or two seasons).

Brood parasitism of southwestern willow flycatcher nests by the brown-headed cowbird (*Molothrus ater*) has been documented throughout the flycatcher's range (Brown 1988, Whitfield 1990, Muiznieks *et al.* 1994, Whitfield 1994, Hull and Parker 1995, Maynard 1995, Sferra *et al.* 1995, Sogge 1995b). Cowbirds lay their eggs in the nests of other species directly affecting their hosts by reducing nest success. Cowbird parasitism reduces host nest success in several ways. Cowbirds may remove some of the host's eggs, reducing overall fecundity. Hosts may abandon parasitized nests and attempt to renest, which can result in reduced clutch sizes, delayed fledging, and reduced overall nesting success and fledgling survivorship (Whitfield 1994, Whitfield and Strong 1995). Cowbird eggs, which require a shorter incubation period than those of many passerine hosts, hatch earlier giving cowbird nestlings a competitive advantage over the host's young for parental care (Bent 1960, McGeen 1972, Mayfield 1977, Brittingham and Temple 1983). Where studied, high rates of cowbird parasitism have coincided with southwestern willow flycatcher population declines (Whitfield 1994, Sogge 1995a, Sogge 1995c, Whitfield and Strong 1995), or, at a minimum, resulted in reduced or complete elimination of nesting success (Muiznieks *et al.* 1994, Whitfield 1994, Maynard 1995, Sferra *et al.* 1995, Sogge 1995a, Sogge 1995c, Whitfield and Strong 1995). Whitfield and Strong (1995) found that flycatcher nestlings fledged after July 20th had a significantly lower return rate and that cowbird parasitism was often the cause of delayed fledging.

## Habitat Use

The southwestern willow flycatcher breeds in dense riparian habitats from sea level in California to over 7000 feet in Arizona and southwestern Colorado. Throughout its wide geographic and elevational range, its riparian habitat can be broadly described based on plant species composition and habitat structure (Sogge *et al.* 1997). These attributes are among the most conspicuous components of flycatcher habitat, but not necessarily the only important components. They are easily identified from photographs or during field visits and have been useful in conceptualizing, selecting, and evaluating suitable survey habitat. Photographs and accompanying text provided in Sogge *et al.* (1997) characterize the considerable variation in habitat structure and plant species composition found at breeding sites throughout the southwestern willow flycatcher's range. Two components that vary less across this subspecies' range are vegetation density and the presence of surface water. Those and other characteristics, such as size and shape of habitat patches, are described further below.

Based on the diversity of plant species composition and complexity of habitat structure, four basic habitat types can be described for the southwestern willow flycatcher. Those types are described below and should be referenced with photographs provided in Sogge *et al.* (1997). When reviewing the habitat descriptions below and applying them to a particular location in the field, keep in mind that characteristics of actual breeding sites fall somewhere on a continuum from monotypic to multiple plant species, and from a relatively simple habitat structure characterized by a single vegetation stratum to more complex habitat patches characterized by multiple-strata.

*Monotypic willow:* Nearly monotypic, dense stands of willow (often *S. exigua* or *S. geyeriana*) 3 to 7 m in height with no distinct overstory layer; usually very dense structure in at least lower 2 m; live foliage density is high from the ground to canopy.

*Monotypic exotic:* Nearly monotypic, dense stands of exotics such as saltcedar (*Tamarisk* sp.) or Russian olive (*Elaeagnus angustifolia*) 4 to 10 m in height forming a nearly continuous,

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closed canopy (with no distinct canopy layer); lower 2 m may be very difficult to penetrate due to branch density; however live foliage volume may be relatively low from 1 to 2 m above ground; canopy density uniformly high.

*Native broadleaf dominated:* Comprised of dense stands of single species (often Goodding's or other willows) or mixtures of native broadleaf trees and shrubs including, but not limited to, cottonwood, willows, boxelder, ash, buttonbush, and stinging nettle from 4 to 15 m in height; characterized by trees of different size classes; may have distinct overstory of cottonwood, willow or other broadleaf species, with recognizable subcanopy layers and a dense understory of mixed species; exotic/introduced species may be a rare component, particularly in understory.

*Mixed native/exotic:* Dense mixtures of native broadleaf trees and shrubs (such as those listed above) mixed with exotic species such as tamarisk and Russian olive; exotics are often primarily in the understory, but may also be a component of overstory; the native and exotic components may be dispersed throughout the habitat or concentrated as a distinct patch within a larger matrix of habitat; overall, a particular site may be dominated primarily by natives, exotics, or be a more or less equal mixture.

There are other potentially important dimensions or characteristics of southwestern willow flycatcher habitat, including: size, shape, and distribution of vegetation patches; hydrology; prey types and abundance; parasites; predators; environmental factors (e.g. temperature, humidity); and interspecific competition. Underlying these are factors relating to population dynamics, such as demography (i.e. birth and death rates, age-specific fecundity), the distribution of breeding groups across the landscape, flycatcher dispersal patterns, migration routes, site fidelity, philopatry, and degree of conspecific sociality (e.g. coloniality). Most of these attributes are not well understood for the southwestern willow flycatcher. However, some of these factors may be critical to understanding current population dynamics and habitat use. For example, characterizations of suitable breeding habitat may be significantly biased if observed patterns of habitat use are influenced by intrinsic dispersal patterns and capabilities rather than overall habitat quality.

Ultimately, habitat suitability should be measured in terms of reproductive success and survivorship that result in a positive rate of population growth. Without long-term data that correlate or experimentally verify which combination of the above attributes contribute to population growth, habitat descriptions should be viewed broadly and considered descriptors of "suitable survey habitat."

The size and shape of occupied riparian habitat patches vary considerably. Southwestern willow flycatchers have been found nesting in patches as small as 0.8 ha (e.g. Grand Canyon) and as large as several hundred hectares (e.g. Roosevelt Lake, Lake Mead). When viewed from above, the mixed vegetation types in particular often appear as a mosaic of plant species and patch shapes and sizes. In contrast, narrow, linear riparian habitats one or two trees wide do not appear to contain attributes attractive to nesting flycatchers. However, flycatchers have been found using these habitats during migration.

Open water, cienegas, marshy seeps, or saturated soil are typically in the vicinity of flycatcher territories and nests; flycatchers sometimes nest in areas where nesting substrates were in standing water (Maynard 1995, Sferra *et al.* 1995, 1997). However, hydrological conditions at a particular site can vary remarkably here in the arid Southwest within a season and between years. At some locations, particularly during drier years, water or saturated soil is only present early in the breeding season (i.e. May and part of June). However, the total absence of water or visibly saturated soil has been documented at several sites where the river channel has been modified (e.g. creation of pilot channels), where modification of subsurface flows has occurred (e.g. agricultural runoff), or as a result of changes in river channel configuration after flood events (Spencer *et al.* 1996).

## Nest placement and nesting substrate

Southwestern willow flycatcher nests are open cup structures, approximately 8 cm high and 8 cm wide (outside dimensions), exclusive of any dangling material at the bottom. Nests are typically placed in the fork of a branch with the nest cup supported by several small-diameter vertical stems. The main branch from which the fork originates may be oriented vertically, horizontally, or at an angle, and stem diameter for the main supporting branch can be as small as three to four cm. Vertical stems supporting the nest cup are typically one to two cm in diameter. Occasionally, southwestern willow flycatchers place their nests at the juncture of stems from separate plants, sometimes different plant species. Those nests are also characterized by vertically-oriented stems supporting the nest cup. Spencer *et al.* (1996) measured the distance between flycatcher nests and shrub/tree center for 38 nests in monotypic saltcedar and mixed native broadleaf/saltcedar habitats. In monotypic saltcedar stands (n=31), nest placement varied from 0.0 m (center stem of shrub or tree) to 2.5 m. In the mixed riparian habitat (n=7), nest placement varied from 0.0 to 3.3 m.

Nest height relative to the base of nest substrate also varies across the southwestern willow flycatcher's range and may be correlated with height of nest substrate and/or overall canopy height. Table x1 presents data on nest heights in different riparian habitat types across the flycatcher's range. Southwestern willow flycatcher nests have been found as low as 0.6 m above the ground to 14 m above the ground. The data presented in Table x1 demonstrate that flycatchers using predominantly native broadleaf riparian habitats nest relatively low to the ground (between 1.8 m and 2.1 m on average), whereas those using mixed native/exotic and monotypic exotic riparian habitats nest relatively high above the ground (between 4.3 m and 7.4 m on average).

Historic egg/nest collections and species' descriptions from throughout the southwestern willow flycatcher's range confirm the bird's widespread use of willow for nesting (Phillips 1948, Phillips *et al.* 1964, Hubbard 1987, Unitt 1987, T. Huels *in litt.* 1993, San Diego Natural History Museum 1995). Of the 34 nests found by Brown in 1902 near Yuma on the lower Colorado and Gila rivers, 33 were in Goodding's willow and one was in arrowweed. Data from historic egg collections from southern California and more current studies indicate that 75 to 80% of nests were placed in willows (San Diego Natural History Museum 1995). Currently, southwestern willow flycatchers use a wide variety of plant species for nesting substrates. At the monotypic willow stands that characterize high elevation sites in Arizona, Geyer willow was used almost exclusively for nesting (Muiznieks *et al.* 1994). At the inflow to Lake Mead on the Colorado River, Goodding's willow was the primary nesting substrate (R. McKernan unpubl. data). Along a 20-mile stretch of the Gila River in Grant County, New Mexico, where boxelder is the dominant understory species, 76% of flycatcher nests were placed in boxelder, with the remainder in Russian olive and saltcedar (Skaggs 1995). At the inflows of Tonto Creek and Salt River to Roosevelt Lake in Gila County, Arizona, both of which are comprised of monotypic stands of saltcedar, 100% of flycatcher nests were placed in saltcedar (Muiznieks *et al.* 1994, Sferra *et al.* 1995, Spencer *et al.* 1996). On the San Luis Rey River in San Diego County, California, approximately 90% of flycatcher nests were placed in live oak (*Quercus agrifolia*), which became the dominant plant species adjacent to the stream after willows were removed in the 1950s as a water conservation measure and a reservoir upstream reduced flood frequency and streamflow volume (W. Haas, San Diego Natural History Museum, pers. comm., 1995). Other plant species that southwestern willow flycatcher nests have been documented in include: buttonbush, black twinberry (*Lonicera involucrata*), Fremont cottonwood, white alder (*Alnus rhombifolia*), blackberry (*rubus ursinus*), Russian olive, and *S. hindsiana*.

Territory size

Southwestern willow flycatcher territory size, as defined by song locations of territorial birds, probably changes with population density, habitat quality, and nesting stage. Early in the season, territorial flycatchers may move several hundred meters between singing locations (Sogge *et al.* 1995, Petterson and Sogge 1996). It is not known whether these movements represent polyterritorial behavior or active defense of the entire area encompassed by singing locations. However, during incubation and nestling phases territory size, or at least the activity centers of pairs, can be very small and restricted to an area less than one-half hectare. Sogge *et al.* 1995 estimated a breeding territory size of 0.2 ha for a pair of flycatchers occupying a 0.6 ha patch on the Colorado River. Activity centers may expand after young are fledged but while still dependent on adults.

Distribution and abundance

Unitt (1987) noted that taxonomic confusion between *E. traillii* and *E. alnorum* (alder flycatcher) and among other *Empidonax* species that migrate through the southwestern U.S. probably accounted for the relative lack of research on the southwestern willow flycatcher. The alder and willow flycatchers, formerly known as Traill's flycatcher, were not officially recognized as separate species until the American Ornithologist's Union published its sixth edition Checklist of North American Birds (AOU 1983). The lack of systematic, rangewide collections of southwestern willow flycatchers preclude a complete description of this subspecies' former distribution and abundance. However, the more than 600 egg, nest, and specimen records available from museums throughout the U.S. in combination with state, county, and local faunal accounts from the first half of the 20th Century do indicate that, historically, the southwestern willow flycatcher was more widespread and, at least, locally abundant.

Phillips (1948) first described *E.t. extimus* from a specimen collected by Gale Monson on the lower San Pedro River near Feldman, AZ. The taxonomic validity of *E.t. extimus* was subsequently reviewed by Hubbard (1987), Unitt (1987), and Browning (1993), and has been accepted by most authors (e.g., Aldrich 1951, Behle and Higgins 1959, Phillips *et al.* 1964, Oberholser 1974, Monson and Phillips 1981, Harris *et al.* 1987, Schlorff 1990, Harris 1991). Unitt (1987) reviewed historical and contemporary records of *E.t. extimus* throughout its range, determining that it had "declined precipitously..." and that although the data reveal no trend in the past few years, the population is clearly much smaller now than 50 years ago, and no change in the factors responsible for the decline seem likely.

Overall, Unitt (1987) documented the loss of more than 70 breeding locations rangewide, including locations along the periphery and within core drainages that form this subspecies' range. Unitt estimated that, rangewide, the southwestern willow flycatcher population probably was comprised of 500 to 1000 pairs. Below is a state by state comparison of historic and current data for the southwestern willow flycatcher. Since 1992 more than 800 historic and new locations have been surveyed rangewide to document the status of the southwestern willow flycatcher (some sites in southern California have been surveyed since the late 1980s). Survey efforts in most states were done under the auspices of the Partners In Flight program, which served as the coordinating body for survey training sessions and review and synthesis of data. The extensive and, in some cases, intensive nature of these efforts have provided a critical baseline for the current distribution, abundance, and reproductive success of southwestern willow flycatchers rangewide.

## California

The historic range of southwestern willow flycatchers in California apparently included all lowland riparian areas in the southern third of the state. It was considered a common breeder where suitable habitat existed (Wheelock 1912, Willett 1912, 1933, Grinnel and Miller 1944). Unitt (1984, 1987) concluded that it was once common in the Los Angeles basin, the San Bernardino/Riverside area, and San Diego County. Specimen and egg/nest collections confirm its former distribution in all coastal counties from San Diego Co. to San Luis Obispo Co., as well as in the inland counties, Kern, Inyo, Mohave, San Bernardino, and Imperial. Unitt (1987) documented that the flycatcher had been extirpated, or virtually extirpated (i.e., few territories remaining) from the Santa Clara River (Ventura Co.), Los Angeles River (Los Angeles Co.), Santa Ana River (Orange and Riverside counties), San Diego River (San Diego Co.), lower Colorado River (Imperial and Riverside counties and adjacent counties in AZ), Owen's River (Inyo Co.), and the Mohave River (San Bernardino Co.). Its former abundance in California is evident from the 72 egg and nest sets collected in Los Angeles County, alone, between 1890 and 1912, and from Herbert Brown's 34 nests and nine specimens taken in June of 1902 from the lower Colorado river near Yuma. Local collections of this magnitude suggest that this subspecies was locally very abundant.

Survey and monitoring efforts since the late 1980s have confirmed the southwestern willow flycatcher's presence at 18 locations on 11 drainages in southern California (including Colorado

River). Current known flycatcher breeding sites are restricted to three counties, San Diego, Riverside, Santa Barbara, and Kern. Combining survey data for all sites surveyed since the late 1980s for a composite population estimate, the total known southwestern willow flycatcher population in southern California is 114 territories (Table x2). Of the 18 sites where flycatchers have been documented, 72% (13) contain five or fewer territorial flycatchers; 22% (four sites) have single pairs, or unmated territorial birds. Only three drainages are known to have 20 or more flycatcher territories, the San Luis Rey River (San Diego Co.), South Fork Kern River (Kern Co.), and Santa Ynez River (Santa Barbara Co.).

Authorized (permitted) and unauthorized activities in riparian habitats continue to adversely affect occupied flycatcher habitat in southern California. For example, approximately one km of occupied habitat on the Santa Ynez River in Santa Barbara County was modified or completely eliminated in 1996 when expansion of agricultural fields resulted in clearing of riparian vegetation (USFWS *in litt.*). A programmatic section 7 consultation on Camp Pendleton in San Diego County, resulted in a conservation target of 20 southwestern willow flycatcher pairs (Table x3). The Base currently has approximately 22 pairs of flycatchers, in contrast to the 348 pairs of the sympatric and endangered least Bell's vireo (*Vireo bellii pusillus*), which through the Base's conservation efforts increased from a low of 27 pairs in 1984. The Army Corps of Engineers' operations of Lake Isabella (Kern County) will result in long-term inundation of the 485-ha South Fork Wildlife Area, also proposed critical habitat for the flycatcher. The Wildlife Area represents a significant recovery area occupied by 8 to 10 pairs of flycatchers prior to inundation and lies downstream of one of California's largest southwestern willow flycatcher breeding groups on the Kern River Preserve.

## Arizona

Historic records for Arizona indicate the former range of the southwestern willow flycatcher included portions of all major river systems (Colorado, Salt, Verde, Gila, Santa Cruz, and San Pedro) and major tributaries, such as the Little Colorado River and headwaters, and White River. Unitt (1987) noted that "probably the steepest decline in the population levels of *extimus* has occurred in Arizona." The bird has been extirpated or virtually extirpated from the Santa Cruz River (Pima Co.), upper San Pedro River (Cochise Co.), lower San Pedro River at PZ Ranch (Pinal Co.), Blue River (Greenlee Co.), Colorado River at Lees Ferry (Coconino Co.), Colorado River (Yuma Co.), Gila River (Yuma Co.), and Verde River at Tuzigoot Bridge (Yavapai Co.). Currently, 150 territories are known from 39 sites along nine drainages statewide, including the Colorado River (Table x2). As in California, the majority of breeding groups in Arizona are extremely small; of the 39 sites where flycatchers have been documented, 74% (29) contain five or fewer territorial flycatchers. Moreover, 15 to 18% of all sites in Arizona are comprised of single, unmated territorial birds.

Permitted activities and stochastic events also continue to adversely affect the distribution and extent of occupied and potential breeding habitat throughout Arizona. For example, the Bureau of Reclamation is operating the new conservation space at Roosevelt Lake, which at capacity would totally inundate the riparian stands occupied by Arizona's largest breeding group (Table x3). As a result of Reclamation's operations on the lower Colorado River, the 445-ha Goodding's willow stand at the inflow to Lake Mead has been partially inundated since September 1995. Despite partial inundation, approximately eight pairs of flycatchers were documented nesting at the inflow during the 1996 breeding season. As of April 1997, inundation of that habitat was nearly complete. Reclamation (1996) projected the mortality of that stand sometime during 1997 as a result of prolonged inundation of root crowns (i.e. > two growing seasons).

In June of 1996, a catastrophic fire destroyed approximately one km of occupied habitat on the San Pedro River in Pinal County. That fire resulted in the forced dispersal or loss of up to 8 pairs of flycatchers (Paxton *et al.* 1996). In June of 1995, approximately three miles of occupied riparian habitat burned on the Gila River in Pinal County (Bureau of Land Management *in litt.*). It is not known how many flycatchers occupied that location. Approximately two km of riparian habitat burned in Graham County in the vicinity of Safford during 1996. It is not known whether that area was occupied by southwestern willow flycatchers, however, it did lie just downstream of an occupied patch that was partially eliminated by Solomon Bridge (Table x3). The anticipated effects of construction of the Solomon Bridge was dispersal of flycatchers into adjacent habitat. The capability of adjacent habitat to absorb that dispersal was compromised by the fire near Safford.

**New Mexico**

Unitt (1987) considered New Mexico as the state with the greatest number of *extimus* remaining. After reviewing the historic status of the flycatcher and its riparian habitat in New Mexico, Hubbard (1987) concluded,

> [it] is virtually inescapable that a decrease has occurred in the population of breeding willow flycatchers in New Mexico over historic time. This is based on the fact that wooded sloughs and similar habitats have been widely eliminated along streams in New Mexico, largely as a result of the activities of man in the area.

Unitt (1987), Hubbard (1987), and more recent survey efforts have documented extirpation or virtual extirpation in New Mexico on the San Juan River (San Juan Co.), near Zuni (McKinley Co.), Blue Water Creek (Cibola Co.), Rio Grande (Dona Ana Co. and Socorro Co.). Survey and monitoring efforts since 1993 have documented 173 flycatcher territories on eight drainages (Table x2). Approximately 135 of these territories occur in remnant strips of riparian forest within a 20-mile stretch of the Gila River in Grant Co (Skaggs 1995). This area contains the largest known breeding group rangewide. Outside of Grant County, however, few flycatchers remain. Statewide, 84% (16) of the 19 sites with flycatchers contain five or fewer territorial birds. Six sites are comprised of single pairs or unmated territorial flycatchers, and six others are comprised of two pairs or two unmated territorial birds.

**Texas**

The Pecos and Rio Grande rivers in western Texas are considered the easternmost boundary for the southwestern willow flycatcher. Unitt (1987) found specimens from four locations in Brewster, Hudspeth, and Loving counties where the subspecies is no longer believed to be present. Landowner permission to survey riparian areas on private property has not been obtained, thus current, systematic survey data is not available for Texas. There have been no other recent reports, anecdotal or incidental, of southwestern willow flycatcher breeding attempts in the portion of western Texas where they occurred historically. Given that surveys in adjacent Dona Ana County, New Mexico, have failed to document breeding along historically-occupied portions of the Rio Grande, the Service believes it is likely that the southwestern willow flycatcher has been extirpated from Texas.

**Colorado**

The taxonomic status and the historic distribution and abundance of willow flycatchers in southwestern Colorado remains unclear due to a lack of specimen data and breeding records. Preliminary data on song dialects suggests that the few birds recently documented in southwestern Colorado may be *E.t. extimus*. These sightings have prompted State and Federal agencies to delineate provisional boundaries for southwestern willow flycatchers and sponsor statewide survey efforts. Survey efforts since 1993 have documented a total of six locations in Delta, Mesa, and San Miguel counties where southwestern willow flycatchers have been found (Table x2). Two locations have single, unmated males; two locations have single pairs, and the remaining two locations are comprised of four to seven territories each.

On March 9, 1997 a fire started by an adjacent landowner burned a 32-ha portion of the Escalante Wildlife near Delta, Colorado. That location comprised one of the largest known breeding sites for southwestern willow flycatchers in Colorado with approximately seven pairs occupying the site in 1996.

**Utah**

Specimen data reveal that southwestern willow flycatcher historically occurred in southern Utah along the Colorado River, San Juan River, Kanab Creek, Virgin River, and Santa Clara River (Unitt 1987). Their northern boundary in south-central Utah remains unclear due to a lack of specimen data from that region. The southwestern willow flycatcher no longer occurs along the Colorado River in Glen Canyon where Lake Powell inundated historically-occupied habitat, nor in unflooded portions of Glen Canyon near Lee's Ferry where southwestern willow flycatchers were documented nesting in 1938. Similarly, recent surveys on the Virgin River and tributaries and Kanab Creek have failed to document their presence (McDonald *et al.* 1995). Single, territorial males and possibly a pair of southwestern willow flycatchers were documented at two locations on the San Juan River (San Juan Co.) in 1995, but breeding was not confirmed (Sogge 1995b). The population totals for Utah are summarized in Table x2.

## Nevada

Unitt (1987) documented three locations in Clark County from which southwestern willow flycatchers had been collected, but not found after 1970. Current survey efforts have documented a single location with two unmated males on the Virgin River in Clark County (Tomlinson *in litt.*)(Table x2).

Rangewide, the current known population of southwestern willow flycatchers stands at approximately 454 territories (Table x2). These results indicate a critical population status; more than 75% of the locations where flycatchers have been found are comprised of five or fewer territorial birds and up to 20% of the locations are comprised of single, unmated individuals. The distribution of breeding groups is highly fragmented, with groups often separated by considerable distances (e.g., approximately 88 km straight-line distance between breeding flycatchers at Roosevelt Lake, Gila Co., AZ, and the next closest breeding groups known on either the San Pedro River (Pinal Co.) or Verde River (Yavapai Co.)). Additional survey effort, particularly in southern California, may discover additional small breeding groups. However, rangewide survey efforts have yielded positive results in less than 10% of surveyed locations. Moreover, survey results reveal a consistent pattern rangewide: the southwestern willow flycatcher population as a whole is comprised of extremely small, widely-separated breeding groups or unmated individuals.

The data presented in Table x2 represents a composite of surveys conducted since 1992. Locations that had southwestern willow flycatchers for only one year were tabulated as if the location is still extant. Given that extirpation has been documented at several locations during the survey period, this method of analyses introduces a bias that may overestimate the number of breeding groups and overall population size. In addition, females have been documented singing as frequently as males. Because the established survey method relies on singing birds as the entity defining a territory (Tibbitts *et al.* 1994), double-counting may be another source of sampling error that biases population estimates upward. The figure of 454 southwestern willow flycatcher territories is an approximation based on considerable survey effort, both extensive and intensive. Given sampling errors that may bias population estimates positively or negatively (e.g., incomplete survey effort, double-counting males/females, composite tabulation methodology), natural population fluctuation, and random events, it is likely that the total population of southwestern willow flycatchers is fluctuating at between 300 and 500 territories with a substantial proportion of individuals remaining unmated. If all extant sites were fully protected, at such low population levels random demographic, environmental, and genetic events could lead to extirpation of breeding groups and eventually render this species extinct. The high proportion of unmated individuals documented during recent survey efforts suggests the southwestern willow flycatcher may already be subject to a combination of these factors (e.g., uneven sex ratios, low probability of finding mates in a highly fragmented landscape).

Southwestern willow flycatcher reproductive success

Intensive nest monitoring efforts in California, Arizona, and New Mexico have revealed that: (1) sites with both relatively large and small numbers of pairs have experienced extremely high rates of brood parasitism; (2) high levels of cowbird parasitism in combination with nest loss due to predation have resulted in low reproductive success and, in some cases, population declines; (3) at some sites, levels of cowbird parasitism remain high across years, while at others parasitism varies temporally with cowbirds absent in some years; (4) the probability of a southwestern willow flycatcher successfully fledging its own young from a nest that has been parasitized by cowbirds is low (i.e., < 5%); (5) cowbird parasitism and/or nest loss due to predation often result in reduced fecundity in subsequent nesting attempts, delayed fledging, and reduced survivorship of late-fledged young, and; (6) nest loss due to predation appears more constant from year to year and across sites, generally in the range of 30 to 50%.

On the South Fork Kern River (Kern Co., CA), Whitfield (1993) documented a precipitous decline in the southwestern willow flycatcher breeding population from 1989 to 1993 (44 to 27 pairs). During that same period cowbird parasitism rates between 50 and 80 percent were also documented (Whitfield 1993) (Table x4). A cowbird trapping program initiated in 1993 reduced cowbird parasitism rates to < 20%. Southwestern willow flycatcher population numbers appear to have stabilized at 32 to 34 pairs in 1993, 1994, and 1995 (Whitfield 1994, Whitfield and Strong 1995). Predation rates have remained relatively constant in the range of 33 to 47% (Table x4). Southwestern willow flycatcher nest success increased from 26% prior to cowbird trapping to 48% after trapping was implemented (Whitfield and Strong 1995). In addition, the number of young fledged also increased from 1.01 young/pair to 1.73 young/pair during the same period.

Whitfield and Strong (1995) found that, besides lowering nest success, fecundity, and the number of young produced, cowbird parasitism may also lower survivorship of southwestern willow flycatcher young fledged late in the season. Southwestern willow flycatchers that abandon parasitized nests or renest after fledging cowbirds lay fewer eggs in subsequent clutches and, if successful, fledge young late in the season. Whitfield and Strong determined that cowbird parasitism delayed successful southwestern willow flycatcher nesting by at least 13 days and this delay resulted in significantly different return rates of juveniles. Only 6.4% of southwestern willow flycatcher young that came from late nests were recaptured in subsequent years, whereas 21.9% of young that came from early nests were recaptured. If these recapture rates mirror actual survivorship, then even though some parasitized southwestern willow flycatchers eventually fledge their own young, nest loss due to parasitism or depredation may have the more insidious effect of reducing overall juvenile survivorship. Despite the cowbird trapping program and increased reproductive success, Whitfield has not observed a population increase at her study area. Whitfield and Strong (1995) speculate that other factors in addition to cowbird parasitism, such as habitat loss and pesticide use on wintering grounds and/or stochastic events such as storms resulting in mortality, may be keeping population numbers low.

The number of unmated, territorial, and paired southwestern willow flycatchers detected on the Colorado River in the Grand Canyon has remained low since monitoring began in 1982. Brown (1994) reported that at least 50% of the southwestern willow flycatcher nests monitored in the Grand Canyon between 1982 and 1987 were parasitized by brown-headed cowbirds. Brown (1994) did not report data on productivity. Given that the probability of successfully fledging a single chick is low when a nest is parasitized and the high proportion of nests parasitized during Brown's study, it is likely that southwestern willow flycatcher productivity during that period was also low. In 1992, when comprehensive nest monitoring was initiated, two pairs were present, with only one establishing a nest. That nest successfully fledged three chicks (Sogge and Tibbitts 1992). In 1993, one breeding pair, one male with two females, and six unpaired males were detected. Three nests were found, all of which were parasitized by brown-headed cowbirds (Table x4). No southwestern willow flycatchers were successfully reared in Grand Canyon in 1993 (Sogge *et al.* 1993). Four pairs and one unpaired male occupied Grand Canyon in 1994. Nine nests were attempted, at least four of which were parasitized by cowbirds. All nesting attempts eventually failed due to predation or abandonment (Sogge and Tibbitts 1994). In 1995, one breeding pair and three unpaired males were detected (Sogge *et al.* 1995). One nest was found with a single cowbird egg on May 23. On June 4, three southwestern willow flycatcher eggs were present, but the cowbird egg was missing. That nest successfully fledged one chick. In summary, since 1992, 10 known pairs of southwestern willow flycatchers have made 14 nesting attempts in the Grand Canyon, two of which successfully fledged a total of four chicks. This low rate of reproduction indicates that, even with the protections provided annually by the National Park Service (i.e., camping and other activities are prohibited at southwestern willow flycatcher breeding sites), this area is a population sink (Pulliam 1988) where reproduction is not adequate to replace adults and population persistence requires emigration from other breeding areas.

On the Verde River in Yavapai Co., AZ, Ohmart (pers. comm.) discovered four pairs of southwestern willow flycatchers in 1992 at Clarkdale. The breeding status and reproductive success of those birds was not determined. In 1993, two pairs were present and one nest was documented. The nest contained a single cowbird nestling and eventually failed (Muiznieks *et al.* 1994) (Table x4). In 1994, two pairs and one unpaired male were present. Two nests were found, one of which successfully fledged two chicks, the other fledged a single cowbird (Sferra *et al.* 1995). Data from a more limited monitoring effort in 1995 indicate that two unpaired males occupied the Clarkdale site (Sogge 1995a). Surveys during the 1996 breeding season failed to detect any southwestern willow flycatchers at the Clarkdale site. However, one nesting pair was discovered at Tavasci Marsh approximately 2.4 km east of the Clarkdale site. Thus, although since its discovery the Clarkdale site has had only several pairs, cowbird parasitism and nest loss due to depredation resulted in poor reproductive success and may have been responsible for abandonment or extirpation at this site.

Elsewhere in Arizona, population loss or undetected dispersal of breeding groups has been documented since 1993. For example, surveys in 1993 estimated five territorial males at Dudleyville Crossing on the San Pedro River (Pinal Co.). However, surveys in 1994 and 1995 failed to detect any southwestern willow flycatchers at that location (Muiznieks *et al.* 1994, Sferra *et al.* 1995, Spencer *et al.* 1996). Southwestern willow flycatchers detected in 1993 at Soza Wash on the San Pedro River were not detected in followup surveys in 1995, and an individual observed at Ister Flat on the Verde River was not detected in followup surveys during 1994. It is not known whether these events represent mortality of southwestern willow flycatchers, changes in habitat quality, or simply a vagile tendency inherent to this species. At other locations on the San Pedro River in Pinal Co., such as Cook's Lake and PZ Ranch, southwestern willow flycatcher breeding group size has remained stable. However, in 1996 a catastrophic fire destroyed much of the breeding habitat at PZ Ranch resulting in nest loss, abandonment of that site and, perhaps, mortality of adults (Paxton *et al.* 1996).

On the Little Colorado River in Apache Co., AZ, a cowbird parasitism rate of 22% was documented in 1994 (Table x4). In 1995 the parasitism rate was zero. Nest loss due to depredation, however, remained relatively constant (Table x4). On the Rio Grande in Socorro Co., NM, parasitism rates increased from 20% in 1994 to 66% in 1995. In 1996, water was diverted above that breeding location and no southwestern willow flycatchers were present (D.Leal, pers. comm.). It is not known whether those birds dispersed elsewhere or if that breeding group was extirpated. Finally, on the Gila River in Grant Co., NM, Skaggs (1995) monitored 46 nests from a breeding group of approximately 135 pairs. From a subset of 25 nests whose contents were checked directly or inferred through observation, Skaggs estimated a cowbird parasitism rate of between 16 and 27% for 1995 (Table x4).

The data presented above and in Table x4 demonstrate that cowbird parasitism and nest depredation are affecting southwestern willow flycatchers throughout their range. Cowbirds have been documented at more than 90% of sites surveyed (Sogge and Tibbitts 1992, Sogge *et al.* 1993, Camp Pendleton 1996, Muiznieks *et al.* 1994, Sogge and Tibbitts 1994, T. Ireland 1994 *in litt.*, Whitfield 1994, C. Tomlinson 1995 *in litt.*, Griffith and Griffith 1995, Holmgren and Collins 1995, Kus 1995, Maynard 1995, McDonald *et al.* 1995, Sferra *et al.* 1995, Sogge 1995a, Sogge 1995b, Sogge *et al.* 1995, Cooper 1996, San Diego Natural History Museum 1995, Stransky 1995, Whitfield and Strong 1995, Griffith and Griffith 1996 *in litt.*, Skaggs 1995, Spencer *et al.* 1996. Thus, the potential for cowbirds to be a persistent and widespread threat remains high. Cowbird trapping has been demonstrated to be an effective management strategy for increasing reproductive success for the southwestern willow flycatcher as well as for other endangered Passerines (e.g., least Bell's vireo [*Vireo bellii pusillus*], black-capped vireo [*V. atricapillus*], golden-cheeked warbler [*Dendroica chrysoparia*]). It may also benefit juvenile survivorship by increasing the probability that parents fledge birds early in the season. Expansion of cowbird management programs has the potential to not only increase reproductive output and juvenile survivorship at source populations, but also to potentially convert small, sink populations into breeding groups that contribute to population growth and expansion.

Nest loss due to predation is common among small Passerines. The rates documented for southwestern willow flycatchers are also typical for small Passerines (i.e., rates < 50%). However, even at these "typical" levels nest loss due to predation is a significant factor contributing to low reproductive success. Nest predation presents a difficult management challenge because of the variety of taxa involved and the difficulty in developing an effective management plan for more than one taxon. Until specific predators on southwestern willow flycatcher nests are identified, measures to reduce potential predator populations should focus on reducing human activities that attract predators, such as camping, picnicking, etc. where pets are loose and refuse is concentrated.

## ENVIRONMENTAL BASELINE

The environmental baseline includes past and present impacts of all Federal, State, or private actions in the action area, the anticipated impacts of all proposed Federal actions in the action area that have undergone formal or early section 7 consultation, and the impact of State and private actions which are contemporaneous with the consultation process. The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation.

The environmental baseline defines the current status of the species and its habitat in the action area to provide a platform to assess the effects of the action now under consultation. Along the Big Sandy River and the Santa Maria River past and present Federal, State, private, and other human activities that may affect the species include livestock grazing, burro management, agriculture, mining, oil and gas activities, water diversions, sand and gravel operations, road and bridge construction, and recreational activities within southwestern willow flycatcher habitat or areas that contain potential habitat.

The Big Sandy and Santa Maria Rivers are part of the Bill Williams watershed which drains "south and west from its origin along the westerns margin of the Colorado Plateau to enter the Colorado River just upstream" from Parker Dam, Arizona-California (Minckley 1985). The Bill Williams watershed has undergone significant change over the last 125 years as European settlers colonized the area. Livestock grazing, agriculture, and mining, have significantly changed the biotic and abiotic features of the system (Minckley 1985).

Historical data characterizing biological communities prior to the early 1800s are rare. Records from 1853 describe the Big Sandy as being lined by dense riparian vegetation dominated by willows. Swamps resulting from beaver dams were common (Davis 1973). The river alternated between riffles and beds of sand until it neared its confluence with the Bill Williams River where it became a continuous stream of clear water several feet deep (Davis 1973). The Big Sandy has a drainage area of 2,742 mi$^2$, of which 10.1 mi$^2$ are noncontributing (USGS 1994). The annual mean flow of the Big Sandy River from 1967-1994 was 93.8 cubic feet per second.

The Santa Maria River has a drainage area of 1,129 mi$^2$ (USGS 1994). The river is characterized by broad, shallow, sandy-bottomed runs, with few riffles and low gradient. During summer months, surface flow is not sustained and the stream is reduced to a series of disconnected pools (Kepner 1979). The annual mean flow of the Santa Maria was 68.1 cubic feet per second from 1967-1985, 1989-1994.

Currently, the Bill Williams drainage is one of 35 drainages throughout the southwest known to have sites occupied by the southwestern willow flycatcher. The presence of southwestern willow flycatchers is documented in 6 sites throughout the Bill Williams watershed (Corman et. al. 1996). The first recent documentation of breeding southwestern willow flycatchers along the lower Colorado occurred at the mouth of the Bill Williams where an adult was observed feeding a fledgling (Sferra et. al. 1995). Southwestern willow flycatchers have been consistently surveyed at two sites within the action area. A total of 15 birds were surveyed during nine visits to the lower Santa Maria River near the Date Creek confluence from 1993 (the first year of surveys) to 1996. There was at least one established territory in 1993, 1994, and 1995 and at least 4 established territories in 1996. Twenty-two southwestern willow flycatchers were surveyed during nine visits to the lower Big Sandy River at Alamo Lake (Mohave County) from 1994, the first year of surveys (Sferra et. al. 1995, Corman et. al. 1996, Spencer et. al. 1996, Muiznieks et. al. 1994). There were at least four established territories in 1994 and at least six in 1995. So far in 1997, five southwestern willow flycatchers were observed at Alamo Dam on June 3, 1997.

Currently, the habitat within the proposed Herd Management Area exhibits signs of trailing, trampling, browsing by herbivores, and girdling of cottonwood and willow trees.

The Service recently completed formal consultation on a road widening project within the action area, affecting both the Santa Maria and Big Sandy Rivers.

## EFFECTS OF THE ACTION

Although the proposed plan amendments are not designed regarding actions on a site specific level, they do determine the direction in which site specific actions occur. Therefore, the amendment proposals can be considered to have an effect on listed species. Amendment proposals pertaining to burro management are considered in this section. Effects associated with other amendment proposals are considered insignificant or discountable. The designation of burro herd management areas allow multiple tools to be used to maintain burros in a "thriving, natural, ecological balance" as proposed by the BLM. The BLM has not yet established exactly how they will determine a "thriving, natural, ecological balance" other than that various monitoring efforts will occur. Specific actions taken under the proposed amendments that may affect southwestern willow flycatchers will comply with the Act on a case by case basis. Thus effects of methods to achieve the "thriving, natural ecological balance" are difficult to describe.

Burros that live within proposed designated herd areas and the activities used to manage them are likely to disturb, remove, or modify occupied, suitable, and/or potential habitat for southwestern willow flycatchers which may, in turn, adversely affect the species, through consuming vegetation needed by the southwestern willow flycatcher and opening habitat to more use by brown-headed cowbirds.

Burros have been shown to significantly impact cottonwood trees along the Santa Maria River by stripping the bark which causes growth stunting or mortality through girdling (AGFD 1994).

The loss of cottonwoods by burros may open the canopy increasing the likelihood of saltcedar growth which is not shade tolerant thereby reducing the ability of cottonwood trees to compete (AGFD 1994). Burros also have the potential to trample cottonwood and willow seedlings and create trails through potential, suitable, and occupied habitat along the Santa Maria River, removing cover and disturbing birds or nests.

## CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Continued trespass cattle grazing in the riparian areas within the project site coupled with any additional intrusions by recreationists and oil and gas activities may affect the chances of the successful recruitment of cottonwood and willow seedlings.

## CONCLUSION

After reviewing the current status of southwestern willow flycatcher, the environmental baseline for the action area, the effects of the proposed action and the cumulative effects, it is the Service's biological opinion that the BLM's proposed Lower Gila Resource Area Amendment to the Lower Gila North Management Framework Plan and the Lower Gila South Resource Management Plan, is not likely to jeopardize the continued existence of the southwestern willow flycatcher. Critical habitat for this species has been proposed; however, this action does not affect that area. No destruction or adverse modification of proposed critical habitat is anticipated.

## INCIDENTAL TAKE STATEMENT

Sections 4(d) and 9 of the Act, as amended, prohibit taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish or wildlife without a special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. Incidental take is any take of listed animal species that results from, but is not the purpose of, carrying out an otherwise lawful activity conducted by the Federal agency or the applicant. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of this incidental take statement.

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The measures described below are non-discretionary, and must be implemented by the agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The (agency) has a continuing duty to regulate the activity covered by this incidental take statement. If the agency (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

## AMOUNT OR EXTENT OF TAKE

The Service anticipates incidental take of southwestern willow flycatchers will be difficult to detect for the following reason(s): Incidental take of actual species numbers may be difficult to detect because the species has a small body size and finding a dead or impaired specimen is unlikely. However, the following level of take of this species can be anticipated by loss of habitat. Habitat losses may occur in the following manner: no more than 25% of seedling cottonwood and willows < 4 feet tall with apical stem nipping, no more than 10% of cottonwood and willow trees displaying evidence of bark stripping by burros, no increase in the square footage of trailing caused by burros.

If, during the course of the action, the amount or extent of the incidental take anticipated is exceeded, the BLM must reinitiate consultation with the Service immediately to avoid violation of section 9. Operations must be stopped in the interim period between the initiation and completion of the new consultation if it is determined that the impact of the additional taking will cause an irreversible and adverse impact on the species, as required by 50 CFR 402.14(i). An explanation of the causes of the taking should be provided to the Service.

## EFFECT OF THE TAKE

In the accompanying biological opinion, the Service determined that this level of anticipated take is not likely to result in jeopardy to the species or destruction or adverse modification of critical habitat.

## REASONABLE AND PRUDENT MEASURES

The Service believes the following reasonable and prudent measure(s) are necessary and appropriate to minimize take:

1) The BLM will remove burros in the Alamo Herd Management Area as described in the following terms and conditions.

2) The BLM will monitor the effects of burros on vegetation and make appropriate adjustments in burro numbers.

3) The BLM will monitor recruitment and growth of willows and cottonwoods and growth of the midstory and make appropriate adjustments in burro numbers.

4) The BLM as part of their action will provide a yearly qualitative and quantitative report to determine the level of incidental take that actually results from the project .

## TERMS AND CONDITIONS

In order to be exempt from the prohibitions of section 9 of the Act, the (agency) must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary. To implement reasonable and prudent measure 1:

1) a. Within three years of the date of the final biological opinion, the BLM shall manage burro numbers so that the monitoring thresholds are not met or exceeded. Active management must be demonstrated by the first annual report (Terms and Conditions #3).

b. Alternatively, the BLM shall remove burros in the Alamo Herd Management Area in excess of the 200 identified in the Lower Gila North Management Framework Plan and South Resource Management Plan within three years of the date of the final biological opinion. The BLM shall allow burro numbers to fluctuate (or increase) from that level as long as monitoring thresholds are not met or exceeded (25% apical stem nipping, bark stripping, trailing).

To implement reasonable and prudent measures 2 and 3:

2) Monitoring of the project area and other areas that could be affected by the proposed action shall be done to ascertain take of individuals of the species and/or of its habitat that causes harm or harassment to the species. This monitoring will be accomplished using the following protocol:

a. Study transects (numbers and placement) throughout occupied, suitable, and potential southwestern willow flycatcher habitat will be chosen within the Alamo Herd Management Area by the BLM in collaboration with the Service within 6 months of the date of the final biological opinion. All studies will be conducted using methods that are repeatable and that provide valid information that is determined to be usable for decision making by both the BLM and the Service.

b. No more than 10% of cottonwoods or willows displaying stripping from burros will be allowed in occupied, suitable, or potential southwestern willow flycatcher habitat within the herd management area. Additional bark stripping from burros will require the BLM to contact the Service to discuss options including removal of additional burros.

c. On designated transects, measurements of apical stem nipping of cottonwood and willow seedlings < 4 feet tall will be taken yearly and if more than 25% of the plants receive nipping, the BLM will discuss options with the Service, including the removal of additional burros.

d. Square footage of trailing caused by burros will be monitored. If the square footage of trails increase, the BLM will discuss options with the Service, including removal of additional burros.

e. The BLM will avoid conflicts with bald eagles when doing burro removal and monitoring.

To implement reasonable and prudent measure 4:

3) A report of the results of the monitoring, including complete and accurate records of all incidental take that occurred during the course of the project, will be submitted to the Service on a yearly basis. This report will also describe how the terms and conditions of all RPMs in this incidental take statement were implemented.

The reasonable and prudent measures, with their implementing terms and conditions, are designed to minimize incidental take that might otherwise result from the proposed action. With implementation of these measures the Service believes that no southwestern willow flycatchers will be incidentally taken. If, during the course of the action, this minimized level of incidental take is exceeded, such incidental take would represent new information requiring review of the reasonable and prudent measures provided. The Federal agency must immediately provide an explanation of the causes of the taking and review with the Service the need for possible modification of the reasonable and prudent measures.

To the extent that this statement concludes that take of any threatened or endangered species of migratory bird will result from the agency action for which consultation is being made, the Service will not refer the incidental take of any such migratory bird for prosecution under the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §§ 703-712), or the Bald Eagle Protection Act of 1940, as amended (16 U.S.C. §§ 668-668d), if such take is in compliance with the terms and conditions (including amount and/or number) specified herein.

## DISPOSITION OF DEAD, INJURED, OR SICK INDIVIDUALS

If a dead, injured, or sick individual of a listed species is found at the project sites, initial notification must be made to Service Law Enforcement, Federal Building, Room 105, 26 North McDonald, Mesa, Arizona, 85201 (Telephone: 602/261-6443) within three working days of its finding. Written notification must be made within five calendar days and include the date, time, and location of the finding, a photograph of the animal, and any other pertinent information. The notification shall be sent to Law Enforcement with a copy to the Arizona Ecological Services Field Office. Care must be taken in handling sick or injured animals to ensure effective treatment and care, and in handling dead specimens to preserve biological material in the best possible state. If possible, the remains shall be placed with educational or research institutions holding appropriate State and Federal permits. If such institutions are not available, the information noted above shall be obtained and the carcass left in place. Arrangements regarding proper disposition of potential museum specimens shall be made with the institution prior to implementation of the action. Injured animals should be transported to a qualified veterinarian by an authorized biologist. Should any treated animals survive, the Service shall be contacted regarding the final disposition of the animals.

## CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1)The BLM could contribute either monetarily or in kind to the continued monitoring effort of southwestern willow flycatcher presence in the State.

2)The BLM could implement a study to inventory invertebrate populations along the Santa Maria River, in relation to prey availability for southwestern willow flycatcher.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

## REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the action(s) outlined in the (request/reinitiation request). As provided in 50 CFR §402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

For further information please contact Lorena Wada or Ted Cordery. Please refer to the consultation number 2-21-95-F-269, in future correspondence concerning this project.

Sam F. Spiller

Sam F. Spiller

cc: Regional Director, Fish and Wildlife Service, Albuquerque, NM (ES)
State Director, Bureau of Land Management, Phoenix, AZ

Director, Arizona Game and Fish Department, Phoenix, AZ

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# APPENDIX

**Table x1.** Nest height and nest substrate height data by riparian habitat type for the southwestern willow flycatcher.

| Habitat Type | n | Mean Nest Ht. Relative to Base of Nest Substrate [m] ± 1 STD (range) | Mean Nest Substrate Height [m] ± 1 STD (range) | Source |
|---|---|---|---|---|
| Monotypic stands of Geyer willow (Apache Co., AZ) | 33 | 1.8 ±0.3 (1.0 - 2.3) | 4.4 ±0.5 (3.5 - 6.0) | Muiznieks *et al.* (1994), Sferra *et al.* (1995) Spencer *et al.* (1996, 1997) |
| Mixed native broadleaf, predominantly Goodding's willow (Yuma Co., AZ) | 28 | 2.1 ±0.8 (1.2 - 4.9) | - | H. Brown 1902 collections (T. Huels *in litt.*) |
| Mixed native broadleaf (Kern Co., CA) | 134 | 2.1 ±0.1 (0.6 - 10) | 5.6 ±0.3 (1 - 14) | Whitfield and Strong (1995) |
| Mixed native broadleaf/saltcedar (throughout AZ) | 70 | 4.8 ±1.8 (1.5 - 10.5) | 7.4 ±2.3 (3.5 - 17.0) | Muiznieks *et al.* (1994), Sferra *et al.* (1995) Spencer *et al.* (1996, 1997) |
| Mixed native broadleaf/exotic (Grant Co., NM) | 45 | 7.4 ±3.6 (2.0 - 14) | 12.7 ±5.2 (4 - 28) | Skaggs (1995) |
| Monotypic saltcedar (throughout AZ) | 43 | 4.3 ±1.3 (2.7 - 8.0) | 7.7 ±2.0 (3.4 - 12.0) | Muiznieks *et al.* (1994), Sferra *et al.* (1995) Spencer *et al.* (1996, 1997) |

**Table x2.** Rangewide population status for the southwestern willow flycatcher (based on composite of 1993-1995 survey data and 1996 survey data from lower Colorado River)[1].

|  | No. of Sites with Territories | No of. Drainages with Territories | No. of Sites (Drainages) |  |  | Total No. of Territories |
|---|---|---|---|---|---|---|
|  |  |  | with ≤5 Territories | with 6-20 Territories | with >20 Territories |  |
| New Mexico | 19 | 8 | 16 (6) | 2 (0) | 1 (2) | 173 |
| Arizona | 39 | 9 | 29 (4) | 10 (4) | 0 (2) | 150 |
| California | 18 | 11 | 13 (8) | 3 (1) | 2 (3) | 114 |
| Colorado | 6 | 5 | 6 (5) | 0 (0) | 0 (0) | 13 |
| Utah | 2 | 1 | 2 (1) | 0 (0) | 0 (0) | 2 |
| Nevada | 1 | 1 | 1 (1) | 0 (0) | 0 (0) | 2 |
| Texas | ? | ? | ? | ? | ? | ? |
| Total | 85 | 35 | 67 (24) | 15 (4) | 3 (7) | 454 |

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[1] Based on surveys conducted at >800 historic and new sites in NM (Maynard 1995, Cooper 1996, Skaggs 1996); AZ (Sogge and Tibbitts 1992, Sogge *et al.* 1993, Muiznieks *et al.* 1994, Sogge and Tibbitts 1994, Sferra *et al.* 1995, Sogge 1995a, Sogge *et al.* 1995, Spencer *et al.* 1996, 1997, McKernan *in litt.*); CA (Camp Pendleton 1994, Whitfield 1994, Griffith and Griffith 1995, Holmgren and Collins 1995, Kus 1995, San Diego Natural History Museum 1995, Whitfield and Strong 1995, Griffith and Griffith 1996 *in litt.*); CO (T. Ireland 1994 *in litt.*, Stransky 1995); UT (McDonald *et al.* 1995, Sogge 1995b); NV (C. Tomlinson 1995 *in litt.*). Systematic surveys have not been conducted in Texas. For sites surveyed multiple years, highest single-year estimate of territories was used to tabulate status data. Tabulations do not include documented extirpations within survey period. Thus, individual state estimates and rangewide totals may be biased upward.

**Table x3.** Agency actions that have undergone section 7 consultation and levels of incidental take permitted for the southwestern willow flycatcher rangewide.

| Action | Year | Federal Agency[1] | Incidental Take Anticipated |
|---|---|---|---|
| **Arizona** | | | |
| Eastern Roosevelt Lake Watershed Allotment (Maricopa Co.) | 1995* | Tonto NF | Indeterminable |
| Tonto Creek Riparian Unit (Maricopa Co.) | 1995* | Tonto NF | Indeterminable |
| Cedar Bench Allotment (Yavapai Co.) | 1995 | Tonto NF | Indeterminable |
| Tuzigoot Bridge (Yavapai Co.) | 1995* | NPS | None |
| Verde Valley Ranch (Yavapai Co.) | 1995* | Corps | Loss of 2 flycatcher territories |
| Windmill Allotment (Yavapai Co.) | 1995 | Coconino NF | Loss of 1 flycatcher nest annually |
| Romero Road Bridge (Pinal Co.) | 1995* | FEMA | Consultation in process |
| Glen Canyon Spike Flow (Coconino Co.) | 1996 | USBR | Adverse modification of proposed critical habitat |
| Solomon Bridge (Graham Co.) | 1996* | FHWA | Loss of 2 territories |
| Modified Roosevelt Dam (Gila/Maricopa Co.) | 1996* | USBR | Loss of 45 territories; reduced productivity/survivorship 90 birds |
| U.S. Hwy 93 Wickenburg (Mohave Co.) | 1996* | FHWA | Consultation in process |
| Grazing on 13 Allotments (Pinal Co.) | 1996 | BLM | Consultation in process |
| Lower Gila Resource Plan Amend. (Yuma Co.) | 1996 | BLM | Consultation in process |
| Lower Colorado River Operations | 1996* | USBR | Consultation in process |
| U.S. Forest Service Region 3 Forest Plans | 1996 | USFS | Consultation in process |
| Safford District Grazing Allotments | 1996 | BLM | Consultation in process |
| Virgin River Diversion/Fill (Mohave Co.) | 1997 | EPA | None |
| **California** | | | |
| Prado Basin, (Riverside/San Bernardino Co.) | 1994 | Corps | None |
| Orange County Water District (Orange Co.) | 1995 | Corps | None |
| Temescal Wash Bridge (Riverside Co.) | 1995 | Corps | Harm to 2 flycatchers |
| Camp Pendleton (San Diego Co.) | 1995 | DOD | Loss of 4 flycatcher territories |
| Lake Isabella Operations 1996 (Kern Co.) | 1996* | Corps | Inundation 700 ac proposed critical habitat; reduced productivity 14 pairs |
| Lake Isabella Long-Term Operations (Kern Co.) | 1997* | Corps | Consultation in process |
| **Nevada** | | | |
| Gold Properties Resort (Clark Co.) | 1995 | BIA | Harm to 1 flycatcher from habitat loss |

Table x3 (continued).

| Action | Year | Federal Agency[1] | Incidental Take Anticipated |
|---|---|---|---|
| **New Mexico** | | | |
| Corrales Unit, Rio Grande (Bernalillo Co.) | 1995 | Corps | None |
| Rio Puerco Resource Area | 1996 | BLM | Consultation in process |
| Farmington District Resource Management Plan | 1996* | BLM | Consultation in process |
| Mimbres Resource Area Management Plan | 1996* | BLM | Consultation in process |

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[1] BIA = Bureau of Indian Affairs; BLM = Bureau of Land Management; Corps = Army Corps of Engineers; DOD = Dept. of Defense; EPA = Environmental Protection Agency; FEMA = Federal Emergency Management Agency; FHWA = Federal Highway Administration; NF = National Forest; NPS = National Park Service; USBR = U.S. Bureau of Reclamation; USFS = U.S. Forest Service.

* Original proposed action determined to result in jeopardy to the flycatcher and/or adverse modification of proposed critical habitat.

**Table x4.** Nest predation and brood parasitism rates documented for the southwestern willow flycatcher across its range[1].

| Location | Pre-1993 | 1993 | 1994 | 1995 |
|---|---|---|---|---|
| S. Fork Kern River (Kern Co., CA) | | | | |
| % nests parasitized[2] | 50 - 80 | 38* | 16* | 19* |
| % nests depredated | 33 - 42 | 37 | 47 | 34 |
| San Luis Rey River (San Diego Co. CA) | | | | |
| % nests parasitized | - | -* | 0* | 0* |
| % nests depredated | - | - | 28 | 5 |
| Colorado River (Coconino Co., AZ) | | | | |
| % nests parasitized | ≥50 | 100 | 44 | 100 |
| % nests depredated | - | 30 | 78 | 0 |
| Verde River (Yavapai Co., AZ) | | | | |
| % nests parasitized | - | 100 | 50 | extirpated |
| % nests depredated | - | 100 | 50 | |
| Little Colorado River (Apache Co., AZ) | | | | |
| % nests parasitized | - | - | 22 | 0 |
| % nests depredated | - | - | 33 | 28 |
| Rio Grande (Socorro Co., NM) | | | | |
| % nests parasitized | - | - | 20 | 66 |
| % nests depredated | - | - | 40 | 60 |
| Gila River (Grant Co., NM) | | | | |
| % nests parasitized | - | - | - | 16 - 27 |
| % nests depredated | - | - | - | 45 |

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[1] Sources: Sogge and Tibbitts (1992), Sogge *et al.* (1993), Brown (1994), Maynard 1994, Muiznieks *et al.*(1994), Sogge and Tibbitts (1994), Cooper (1995), Skaggs (1995), Sogge (1995a), Sogge *et al.* (1995), Spencer *et al.* (1995), Whitfield and Strong (1995).

[2] Proportion of nests containing at least one brown-headed cowbird egg.

* Brown-headed cowbird control program implemented.

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